



Evaluation of the School Connectivity Program (SCP) and the Building Respect through Internet Dialogue and Global Education Program (BRIDGE)*

VOLUME ONE

June 2007

* After the start of this evaluation, the Youth Programs Division consolidated its management of all School Connectivity programs under the rubric of the **Global Connections and Exchange Program**.

Submitted to:

**U.S. Department of State
Bureau of Educational and Cultural Affairs
Office of Policy and Evaluation
301 4th Street, S.W., Room 336 (SA-44)
Washington, D.C. 20547**

Submitted by:

**Aguirre Division, JBS International, Inc.
1156 15th Street, N.W. Suite 1000
Washington, D.C. 20005**

TABLE OF CONTENTS

ACKNOWLEDGMENTS.....	iii
ACRONYMS	iv
EXECUTIVE SUMMARY.....	vi
1 THE SCHOOL CONNECTIVITY PROGRAM/BRIDGE EVALUATION	1
A. Introduction and Evaluation Overview.....	1
B. The Purpose of the Evaluation.....	2
C. Program Overview	3
D. Brief Overview of the Evaluation Methodology	7
E. A Guide to the Evaluation Report and its Structure	9
2 EVALUATION METHODOLOGY	10
A. Introduction	10
B. Methodologies	12
3 THE SCHOOL CONNECTIVITY PROGRAM IN ARMENIA.....	19
A. Introduction	19
B. Key Findings	19
C. Armenian School Connectivity Program (ASCP) Description	21
D. SCP Activities and Program Outcomes	29
E. Summary Observations	37
4 BUILDING RESPECT THROUGH INTERNET DIALOGUE AND GLOBAL EDUCATION (BRIDGE).....	39
A. Introduction	39
B. Key Findings	39
C. BRIDGE Program Description	41
D. The BRIDGE Program in Lebanon and Program Outcomes	48
E. Summary Observations	58
5 THE SCHOOL CONNECTIVITY PROGRAM IN TAJIKISTAN.....	59
A. Introduction	59
B. Key Findings	59
C. Tajikistan SCP Program Description.....	61
D. TSCP Program Activities	63
E. TSCP Activities and Program Outcomes	71
F. Summary Observations.....	87
6 THE SCHOOL CONNECTIVITY PROGRAM IN SOUTHEASTERN EUROPE.....	91
A. Introduction	91
B. Key Findings	91
C. Southeast Europe School Connectivity Program Description	93

D. School Connectivity Program in Bosnia and Herzegovina and Program Outcomes	102
E. Summary Observations	108
 7 STUDENT INTERNET SURVEYS	 109
A. Introduction	109
B. Key Findings	109
C. Program Outcomes.....	114
D. Summary Observations	122
 8 TEACHER INTERNET SURVEYS.....	 124
A. Introduction	124
B. Key Findings	124
C. Program Outcomes.....	136
D. Summary Observations	143
 9 MASTER TRAINER INTERNET SURVEYS	 145
A. Introduction	145
B. Key Findings	145
C. Program Outcomes.....	149
D. Summary Observations	152
 10 MULTIPLIER EFFECTS AND PROGRAM SUSTAINABILITY	 154
A. Introduction	154
B. Multiplier Effects.....	155
C. Sustainability	159
D. Summary Observations on Sustainability	169
 11 CONCLUSIONS.....	 171
A. Mutual Understanding.....	171
B. Skills and Knowledge Development.....	173
C. Educational Reform	174
D. Program Sustainability	176
E. Civic Education, Community Building, and Community Service	178
F. Reconciliation and Regional Stability	180
G. English Language Instruction and English Language Skills	180
 12 RECOMMENDATIONS.....	 182

ACKNOWLEDGMENTS

This study of the School Connectivity Program could not have been conducted without the cooperation of many organizations and people who contributed their time, advice, energy, and ideas. This evaluation was carried out by the Washington, D.C. staff of the Aguirre Division, JBS International Inc., directed by Dr. Roger Rasnake, and written by Dr. Melinda Pitts.

Research assistance was provided by Aguirre's in-country partners: the Armenian Sociological Association in Armenia; PRISM Research in Bosnia and Herzegovina; the Amr Group in Lebanon; and M-Vector in Tajikistan. Aguirre would like to thank them and their staffs for their invaluable assistance with this endeavor.

Thank you to all the current and former staff members of the U.S. Department of State who contributed to this project. The team is indebted to the Office of Policy and Evaluation staff in the Bureau of Educational and Cultural Affairs (ECA), most especially Karen Aschaffenburg and Robin Silver. We are also grateful to Robert Persiko, Anna Mussman, Carolyn Lantz and Deepa Ghosh in ECA's Youth Programs Office, as well as Sam Eisen, Jennifer Ceriale, Christian Wright, Kimberly Hargan, Rian Harris, Edwina Sagitto, Lejla Pasovic, Ryan Gliha, and Jennifer Washeski.

Additional thanks to the public diplomacy staff in each of the countries we visited, for their assistance, input, and hospitality: Serbia, Armenia, Bosnia and Herzegovina, Lebanon, and Tajikistan.

We also thank the dedicated School Connectivity Program staff, school principals, teachers, Master Trainers, and community members in each of the study countries. Without their cooperation, this research would not have been possible.

Finally, we express our gratitude and heartfelt good wishes to the many School Connectivity Program students we have met and who generously shared their time and thoughts. Wherever the evaluation teams traveled, they were welcomed warmly and received outstanding cooperation from all stakeholders. We express our appreciation to all of these individuals for making those visits both productive and enjoyable.

ACRONYM LIST

ACCELS	American Council for Collaboration in Education and Language Study
ASA	Armenian Sociological Association
ASCP	Armenia School Connectivity Program
BiH	Bosnia and Herzegovina
BRIDGE	Building Respect through Internet Dialogue and Global Education
CARE	Cooperative for Assistance and Relief Everywhere
CRS	Catholic Relief Services
ESL	English as a Second Language
FLEX	Future Leaders Exchange Program
FSA	FREEDOM Support Act
GCEP	Global Connections and Exchange Program
GCYP	Global Citizenship & Youth Philanthropy
GYSD	Global Youth Service Day
ICC	Internet Computer Center
ICT	Information and Communication Technology
iEARN	International Education and Resource Network
IFES	International Foundation for Electoral Systems
ILC	Internet Learning Center
IM	Instant Message
IREX	International Research & Exchanges Board
ISP	Internet Service Provider
IT	Information Technology

NGO	Non-governmental Organization
OSE	On-site Educator
OSM	On-site Monitor
PBL	Project-based Learning
PH	Project Harmony
RCD	Regional Community Developer
REC	Regional Education Coordinator
RI-SOL	Relief International – Schools Online
SAC	Student Action Committee
SCP	School Connectivity Program
SEE	Southeast Europe
SEED	Support for East European Democracy
TeCes	Technology Centers
TSCP	Tajikistan School Connectivity Program
UAE	United Arab Emirates
UCLA	University of California, Los Angeles
UNDP	United Nations Development Program
UNICEF	United Nations Children’s Fund
USCP	Uzbekistan School Connectivity Program
YouthCaN	Youth Communications and Networking

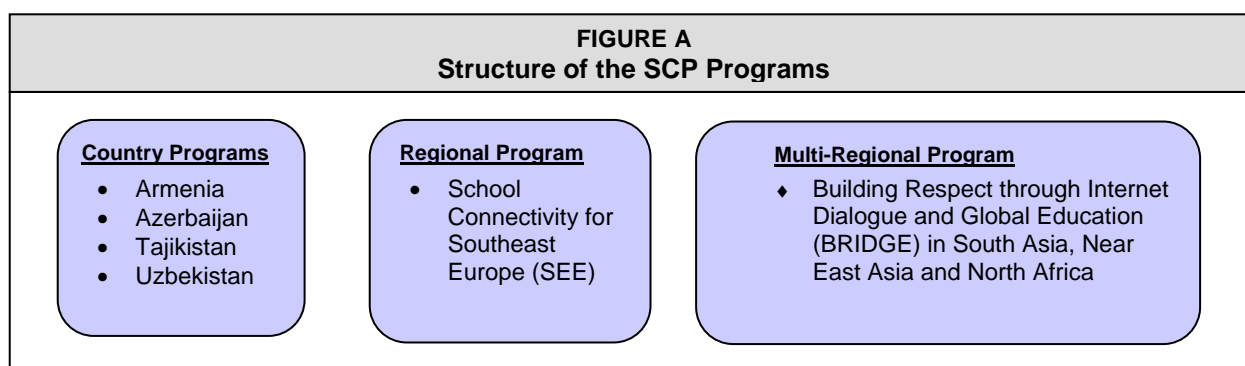


Evaluation of the School Connectivity Program (SCP) and the Building Respect through Internet Dialogue and Global Education Program (BRIDGE)

Executive Summary

June 2007

In November 2004, the Department of State's Bureau of Educational and Cultural Affairs, Office of Policy and Evaluation (ECA/P) awarded Aguirre International (now the Aguirre Division of JBS International, Inc.) a contract for an evaluation of six School Connectivity Programs operating in 22 countries.¹ The structure of the six School Connectivity Programs is illustrated in Figure A.



All of the School Connectivity Programs are managed by the Office of Citizen Exchanges, Youth Programs Division (ECA/PE/C/PY), in the Department of State's Bureau of Educational and Cultural Affairs (ECA). It is important to keep in mind that the School Connectivity Programs are not one cohesive Program; rather, they have been funded at vastly different levels, in various parts of the world, through *multiple pieces of legislation*, with different goals and objectives.² After the start of this evaluation, the Youth Programs Division consolidated its management of all School Connectivity Programs under the rubric of the Global Connections

¹ The twenty-two countries are: Albania, Algeria, Armenia, Azerbaijan, Bosnia and Herzegovina, Bulgaria, Croatia, Egypt, Kosovo, India, Jordan, Lebanon, Macedonia, Montenegro, Morocco, Pakistan, Romania, Serbia, Syria, Tajikistan, Tunisia, and Uzbekistan.

² These School Connectivity Programs operate under the mandate of the Fulbright-Hays Act (the Mutual Educational and Cultural Exchange Act of 1961). Its purpose is to increase mutual understanding between the people of the United States and the people of other countries, support educational and cultural exchange, and foster linkages between people and institutions in the United States and overseas. In addition, the School Connectivity Programs in Eurasia were originally funded under the FREEDOM Support Act (FSA), which supports economic and democratic reform and development in the independent states of the former Soviet Union. The School Connectivity Program in Southeast Europe (SEE) was funded through the Support for East European Democracy (SEED) Act, and designated as a Stability Pact project, with the aim of helping to stimulate the development and use of Information Technology (IT), to create an enabling IT environment, and to foster the use of IT in education in SEE.

and Exchange Program (GCEP).³ *Differences in funding levels and Program goals, however, did not change.*

A. Program Description

The purpose of SCP is to integrate access to the Internet with cutting edge approaches to teaching, instruction, and learning. These Programs provide selected schools and new Internet Learning Centers (ILCs) with computer equipment and Internet connectivity, create fora and arenas for project-based and collaborative learning, and establish online partnerships among schools within individual countries and regions, with the United States, and internationally. They offer intensive technical and educational training in several fields. In this way, they serve as mechanisms for educational reform, foster cross-cultural learning and mutual understanding, enhance educational capacity and professional development, and support civic education, conflict resolution, and English-language instruction. In addition, SCP and BRIDGE Programs connect schools in the United States with schools in participating countries through limited physical exchanges that facilitate the exchange of ideas and act as a catalyst for future online, collaborative activities.

B. Evaluation Purpose and Goals

Specifically, the evaluation examines the following four goals common to all School Connectivity Programs.

1. To determine whether the Program has increased understanding between citizens and communities in the U.S. and citizens and communities overseas, as well as among countries, regionally and internationally.
2. To ascertain whether teachers, students, trainers, and Program staff have developed relevant skills and knowledge, and whether a multiplier effect has facilitated both dissemination of knowledge and skill acquisition among others *not* participating in the Program themselves.
3. To assess the extent to which the Program has catalyzed and assisted educational reforms, including the adoption of new teaching pedagogies, new project-based learning (PBL), collaborative learning, the use of technology in the classroom, and the development of new curricula that integrate new technologies.
4. To determine whether the Programs have laid the groundwork for sustainability, in terms of resources, activities, and linkages.

The evaluation also examines those SCP goals emphasized in particular regional Programs:

1. To determine the effectiveness of SCP in supporting civic education, community building, and community service in the Programs in Eurasia;

³ There are currently 18 countries in the GCEP; Project Harmony is the grantee in Armenia and Azerbaijan. RI-SOL is the grantee in Afghanistan, Bangladesh, the Palestinian Authorities (West Bank) and Tajikistan. IREX is the grantee in Turkmenistan and Uzbekistan. iEARN-BRIDGE is the grantee in Bahrain, Egypt, Indonesia, Iraq, Lebanon, Morocco, Oman, Pakistan, Syria, and United Arab Emirates (UAE). Information on GCEP can be found at <http://exchanges.state.gov/education/students/worldwide/connections.htm>.

2. To ascertain the effectiveness of SCP as a mechanism for reconciliation and regional stability in Southeast Europe (SEE); and
3. To determine the effectiveness of the BRIDGE Program in supporting English language teaching and skills-building in the Middle East, North Africa, and South Asia.

C. Evaluation Methodology

Given the large number of countries in SCP (22 countries in total), ECA/P and Aguirre designed a methodology that combined the strategic choice of qualitative country case studies with quantitative surveys of Program participants, non-participants, and community members (as feasible), in a select set of countries.

Several criteria served as basis for the country case study selection:

- Regional and School Connectivity Program representation (i.e., one country from each regional Program);
- Program history, duration/age, and size;
- Grantee (i.e., four country Programs implemented by four different grantees); and
- Country conditions that enable the Evaluation Team to gain an understanding of the effectiveness of School Connectivity Programs in different economic, political, institutional, and geographic environments, with different levels of Internet penetration and access.

ECA/P and Aguirre decided to conduct case study work in Armenia, Bosnia and Herzegovina, Tajikistan, and Lebanon.

Armenia is the oldest SCP Program and has the greatest number of ILCs and participating schools (270) in all of the country's *marzs* (sub-regional administrative units).

Tajikistan is the newest of the SCP country Programs in this evaluation study. This Program has benefited from some of the lessons learned in the other country Programs, and thus offers an interesting context for the evaluation of SCP activities as they have evolved.

Bosnia and Herzegovina had a small number of participating schools (10), which facilitated site visit coverage of the participating schools. This country provided a good context in which to assess SCP in SEE activities and the effectiveness of the Program's conflict resolution strategies, with respect to Bosnia and Herzegovina's recent history, attempts at reconciliation, and remaining ethnic tensions and divisions.

Lebanon represents the BRIDGE Program countries. While Lebanon has a history of foreign language instruction in the schools (French and English), the use of Internet-based curricula and online collaborative learning projects is not widespread. This provides a solid baseline against which to evaluate the impacts of Program activities.

In addition, **eight other countries** are represented in the **online surveys** of students, teachers and Master Trainers, bringing the total number of Program countries assessed to 12: SCP in Albania,

Armenia, Bosnia and Herzegovina, Croatia, Macedonia, Serbia-Montenegro, Tajikistan, and Uzbekistan; and BRIDGE Programs in Jordan, Lebanon, Morocco, and Pakistan.⁴

In addition, other primary data sources for this evaluation included:

- Background, web-based research on individual country Programs;
- Open-ended interviews with U.S.-based and in-country grantee organization staff;
- Open-ended interviews with school principals and ILC staff;
- Transcripts from focus group and notes from informal discussions with Program participants (students, teachers, Master Trainers, and community members);
- An online survey of community members in Tajikistan; and
- Face-to-face interviews with students from non-Program schools in Armenia, to obtain quantitative data for a comparable group of students who did not participate in the Program.

D. Evaluation Findings

The SCP and BRIDGE Programs are achieving mandated goals, within a varied set of economic, political, and geographic environments, and educational systems.⁵ The Program's multifold components and activities—relying on virtual exchanges, new information and communication technologies, new pedagogies, innovative curricula, and access to the Internet – have been the catalyst for enhanced mutual understanding, have imparted critical “in-demand” skills and knowledge, and have set in motion educational reforms, establishing a “new culture” in the classroom. The Programs have succeeded in improving the English language skills of participants, and developing or reinforcing English language instruction capacity in Program countries. It has also had a significant impact on girls' education, as well as promoted inter-ethnic dialogue.

1. Building Mutual Understanding

Many of the teachers and students emphasized how interactions with counterparts and peers from different countries, through the Program's virtual exchanges, online activities and fora, offered new opportunities for in-depth learning about diverse cultures and daily life in other countries and regions. Even with differences in the participant's prior level of knowledge, involvement in the Program significantly changed and enhanced their understanding of society, culture, and daily life in the United States. Students now understand that they live, learn, and function in a public space that is less confined, its dimensions less limited by national borders, and more global.

⁴ Albanian, Arabic, Armenian, Bosnian, Croatian, English, Macedonian, Serbian, Russian, Tajik, Urdu and Uzbek.

⁵ Please note: Due to some differences in the School Connectivity Program activities, separate surveys were administered to participants in the BRIDGE School Connectivity Programs and those in the rest of the School Connectivity Programs in Southeast Europe and Eurasia. As a result, when findings diverge, analysis of BRIDGE and other SCP findings are noted accordingly. When they do not, SCP is used in reference to all Programs.

a. Program Impact: Broader World View

- A majority of the SCP and BRIDGE students indicated that participation in the Program has changed their views and increased their knowledge of other cultures.
- Eighty percent or more of the Program teachers said that joint projects with partner schools has helped them to gain a better understanding of their partner's culture.
- Students in Armenia, Bosnia and Herzegovina, Lebanon, and Tajikistan all reported that their view of the world has broadened as a result of the Program and their understanding of others has increased.

b. Program Impact: Changes in Views on the U.S. and the American People

- Most SCP and BRIDGE students have favorable views of the American people.
- Roughly half of the Program teachers reported that their views of U.S. values, culture, and daily life have changed moderately or substantially as a result of the Program.
- Over 90 percent of Master Trainers reported favorable views of the American people.
- About 60 percent of Master Trainers said that their degree of understanding of U.S. values, culture, and daily life has changed.

2. Assisting in Educational Reform

Change is occurring *across the Program countries*, as teachers report actively applying the new knowledge, new methodologies, and new approaches to teaching they have learned from the Program. In many ways they are the drivers of the reform process, implementing SCP projects and participating in activities and fora. Many have incorporated the use of the SCP online fora into their regular classroom activities. Some school principals indicated that the SCP has given them the opportunity to implement changes in the classroom more quickly than would have been the case otherwise. As a result, changes in classroom culture are also evident, as teachers behave more as facilitators of the learning process, and students have more of a voice in their education.

a. Program Impact on Innovation in the Classroom

- A majority of the teachers said they have introduced new ideas and new ways of doing things at work.
- Roughly 80 percent of the Master Trainers reported that they have introduced new ideas and new ways of doing things.
- Teachers in Armenia, Bosnia and Herzegovina, Lebanon, and Tajikistan have begun to use the Internet to expand their teaching materials and to use new methodologies in classroom work.

b. Change in Classroom Culture

- The collaborative nature of the Program's online activities has exposed students and teachers to new, more cooperative ways of doing things.
- Teachers have introduced collaborative learning, PBL principles, and integration of IT into classroom activities.

- As a result of the new teaching methodologies introduced by the Program, the locus of action has changed from the teacher to the student.
- Teachers regard themselves more as facilitators and noticed that students are becoming more independent, self-directed, and confident learners.
- Teachers reported that the new teaching methodologies introduced by the Program have made instruction more interesting. Consequently, students pay attention in class and are willing to devote more time to schoolwork in general.

c. Administrative Change

- More than 74 percent of the teachers reported that they received support from the school administration which enabled them to integrate IT into the classroom.

3. Building Skills and Knowledge of Program Participants

Students in the SCP and BRIDGE Programs said they are developing technical skills marketable in a digital world. Students and teachers reported noticeable improvements in computer skills. These improvements have had the side effect of boosting self-confidence. As a result, students and teachers have shown a willingness to try new things and to share their knowledge and computer skills with others. The Program's emphasis on using the Internet for educational purposes has clearly influenced attitudes and behaviors on the part of students and teachers alike. Both groups of participants reported using the Internet to look for information for a class or online project.

a. Program Impact on New In-demand Skills: Students

- Students across the Programs have learned a number of new computer applications; Internet research, e-mail, word processing/spreadsheets, and online discussions are the most commonly cited.
- As a result of the Program, a majority of the students indicated that they access the Internet more frequently now than prior to joining the Program.
- Over 73 percent of the students rated their computer skills as "good" to "excellent."
- Students also reported learning critical life skills, such as team building and teamwork, as a result of their participation in the Program.

b. Program Impact on New In-demand Skills: Teachers

- Teachers' new and improved computer skills are particularly important, as these skills are strongly associated with a broader participation across all the online activities. Teachers with higher levels of confidence in their computer skills engage in more Program activities.
- A majority of Master Trainers also reported that their computer skills have improved.

c. Secondary Impact of Internet Access

- Teachers noticed that providing access to the Internet has had the added benefit of increasing students' motivation to learn English. Over 90 percent of the teachers say that access to the Internet has had a 'large impact' or 'some impact' on their students' motivation to learn English.

4. Civic Education, Community Service, and Community Outreach

SCP has integrated civic education curriculum with community service activities and has sought to include local communities in Program activities.

a. Civic Education

The SCP Programs in Eurasia (Armenia and Tajikistan) have designed and implemented wide-ranging civics education curricula and developed online resources for civic education.

- The Program in Tajikistan developed a Civics Education Textbook and Teachers' Guide in Tajik, Russian, and English. The Program's website in Armenia hosts an online library that contains over 20 civics-based resources to enhance the civics curriculum.
- The online project fora reinforced the Program's focus on civic education. For example, the Armenia Student Parliament Project, with student representatives elected in local schools, exposed students to the political process in Armenia and gave them direct access to individuals they might not normally meet (e.g., Armenian politicians).
- Participation in the online activities has changed student attitudes towards corruption; they have become less accepting and tolerant.
- Participation in the online activities has changed student attitudes towards civic participation (e.g., democracy).
- Sentiments of a 'new way of thinking' were articulated by the students, and a sense of civic engagement is evident in the students of both Programs in Eurasia.
- Across all of the Programs and regions, students indicated that they discuss local and community related issues in the SCP online fora.
- A large number of Master Trainers (87.2%) say that SCP has contributed to greater community participation in local government and that they have hosted or facilitated community meetings and events to discuss local issues.
- The ILCs in Tajikistan have enhanced civic engagement in local communities. Eighty-three percent of the community members surveyed believe that the ILCs have contributed to greater participation in local government.

b. Community Service Activities and Outreach

All of the SCP Programs use community service as a means of teaching students about social responsibility, collective action, and activism. Service to the community is an integral part of each Program and they are often structured so that activities benefit the local community, though often these efforts span regions and countries. Activities have included environmental clean-up

and protection, assisting disadvantaged populations, teaching new skills, and volunteering in community organizations.

- Teachers and students alike indicated that they participate in community service activities, in large numbers.
- Sixty-four percent of the BRIDGE teachers surveyed organized or participated in community service projects with the Program students and 76 percent increased their volunteer and community service activities.
- Fifty-five percent of the SCP teachers surveyed organized community service projects with the Program students and 66 percent participated in volunteer or community service activities.
- Eighty-eight percent of the BRIDGE students reported that their community service activities increased with their participation in the Program and 92 percent intend to continue with these activities in the future, perhaps in a leadership role.
- Forty-four percent of the SCP students increased their volunteer or community service activities, and a larger percentage – 67.3 percent – intend to either participate in or lead community service activities in the future.
- A majority of the Master Trainers surveyed (86%) report that their volunteer activities have increased, that they have provided training to children or community members with special needs (72.4%), and that they have organized new activities or projects in the community (64.1%).

5. Conflict Resolution and Reconciliation

Through SCP's curricula and online activities, SEE students were exposed to peers from different ethnic and/or religious backgrounds, both within their own countries, as well as within the region. One of the unique features of this Program was its focus on building interpersonal communication skills among teachers, as a means of facilitating inter-ethnic dialogue. The online forum for community building, in particular, gave students in the region the opportunity to engage in collaborative projects and collective action across ethnic groups and boundaries.

a. Inter-ethnic Interaction

- In the online fora, the students learned about the daily life outside their home towns, and in other countries.
- As a result of the online activities, students in Bosnia and Herzegovina stressed the commonalities among themselves, as well as with students of different ethnic backgrounds from neighboring countries (e.g., Albania, Kosovo).

b. Cross-cultural Learning

Although conflict resolution, per se, was not the *primary* goal of all SCPs, it is clear that the global emphasis on cross-cultural learning has promoted inter-ethnic interaction and understanding beyond the SEE region.

- In Lebanon, for example, BRIDGE activities reflect the theme: "United Beyond Our Diversity."

- SCP projects in Armenia enabled interaction with students in Azerbaijan, Russia, Chechnya, and Turkey.
- The organization implementing the Program in Tajikistan also took advantage of other Global Connections and Exchange Program it implements in Afghanistan, the Palestinian territories, and Bangladesh, to foster contacts among young people in these places and in Tajikistan. The organization has been able to use these parallel projects to great effect, designing projects through which students in more than one country can collaborate.
- Likewise, it introduced cross-border fora with SCP in Uzbekistan (USCP); these fora enabled the Tajik participants to know and understand their neighbors.

6. English Language Instruction and English Language Skills

Enhancing and refining English language instruction, and by extension, developing participants' English language skills, are key goals of the BRIDGE Program. The acquisition of English language skills has enabled teachers to act as catalysts for the application of these skills throughout the school curriculum. Roughly 70 percent of the BRIDGE online projects are conducted in English, which means that most of the BRIDGE students are at some point communicating online in English. (As noted below, SCP participation in other regions and countries has also resulted in improved English language skills for participants.)

a. Program Impact on English Skills

- Students and teachers reported that their English language skills have improved.
- Program participants (students and teachers) acknowledged that improvement in their English language skills has enabled them to better express themselves in the online fora.
- Eighty-three percent of BRIDGE students reported that their English language abilities have improved since they began participating in the Program.
- Moreover, 80 percent of BRIDGE students believed that the English language skills they have developed in the Program have improved their performance in other coursework.
- Although English language learning is not an explicit focus of SCP elsewhere, almost two-thirds (64%) of those SCP students surveyed reported that their English language skills have improved, as a result of participating in the Program.

b. Program Impact on English Language Instruction

- Almost all of the BRIDGE teachers surveyed (92%) said that they have adopted English language resources from the Internet.
- Close to 70 percent of the teachers surveyed said they have integrated English language materials into classes in other subjects besides English.
- Approximately 67 percent of BRIDGE teachers have updated English language curricula.
- Fifty-six percent of BRIDGE teachers have developed and piloted new English language curriculum.

7. Impact on Young Women and Girls: from the Tajikistan Case Study

In Tajikistan, the SCP has been especially beneficial for girls and young women. In most schools, girls are a majority in the Program's project groups and are well-represented among school ILC users. Frequently, more girls than boys visit ILCs during free hours.

- The Program has given a 'voice' to girls and substantially strengthened their self-confidence. Teachers reported that young women who participated in the Program were more self-confident than those who did not.
- Multiple observers reported that the Program has motivated young women to remain in school. Teachers and school directors emphasized that it is not uncommon, especially in small towns and rural areas, for girls to leave school after ninth grade. The interest and excitement engendered by the project reportedly have kept young women in school until its completion, at the end of eleventh grade.
- Young women are learning about technology and mastering significant computer skills, skills that will be increasingly in demand in the labor market. While the status of young women may have declined in general, since the end of the Soviet Union, the Program provides many young women with a background that will aid them in their future careers and increase their ability to contribute financially to their families and to Tajikistan's development.

8. Multiplier Effects of the Program

While the Program produces multiplier effects in several areas, crucial multiplier effects are generated by the significant extent of knowledge sharing among participants, and between participants and colleagues, peers, family members, and community members. One element of this is the sheer *volume* of sharing (i.e., how many people benefit) and the other is *content* (i.e., what new learning, knowledge, and skills are shared).

When teachers share new knowledge, pedagogies, and skills with colleagues in their own schools and externally, when students share new learning and skills with peers and family members, and when participants transmit new knowledge to members of the community, the multiplier effects are considerable.

a. Sharing Skills with Others

- Students and teachers alike are enthusiastically sharing what they have learned with colleagues and friends.
- This diffusion of knowledge and skills acquired through participation in the Program occurs both formally and informally – at school, in the community, and at home.
- BRIDGE teachers reported sharing their skills with approximately 31 people per month. SCP teachers estimated that they share their skills with roughly 20 people per month.
- BRIDGE students indicated that they share what they have learned with about 18 people per month. SCP students reported sharing their skills with approximately 29 people per month.

b. Content of the Sharing

- Almost 50 percent of the BRIDGE teachers have shared new English language curricula and materials with teachers in *other* schools.
- Slightly more than half of SCP teachers (52.7%) reported sharing new or revised curricula with other schools in the Program and/or schools outside of the Program.
- Likewise, approximately 62 percent of Master Trainers surveyed indicated that they also share new or revised curricula with schools that participate in the Program, as well as those that do not.
- Large numbers of BRIDGE teachers have shared new skills with other teachers: about 57 percent share computer skills, and about 40 percent share collaborative learning skills, ways of identifying educational resources online, and English Language training.
- About one-quarter of SCP teachers indicated that they share two critical skills with other teachers: computer skills and ways of identifying educational resources online.
- Sixty-seven percent of BRIDGE students and 47 percent of SCP students share their computer skills with other students.
- Fifty-seven percent of BRIDGE students share English Language training with family, friends, and community members; 37 percent of the SCP students share computer skills with them, as well.
- In Tajikistan, community members have gained valuable skills by using the ILC and interacting with the ILC staff. Eighty-five percent of the community members surveyed indicated that their computer skills have increased since they began frequenting the ILCs, and 62 percent report that the center has had a large impact on improving their English language skills.

9. Program Sustainability

The Evaluation Team ascertained numerous strategies for sustainability generated by grantees and participants in Program countries. These strategies are deliberate, well-conceived actions and initiatives designed to underpin and secure Program sustainability, once U.S. funding ceases. These include: establishing and maintaining school networks; maintaining professional collaborations and contacts with people met during the Program; collaboration with and support from other donors in Program countries; information dissemination; and fundraising and planning to meet resource needs.

a. Building Networks of Schools and Teachers

- ASCP has done considerable work in establishing and maintaining a network of 324 Program schools and computer centers.
- TSCP has built a substantial network of schools and computer centers. In December 2004, an independent NGO named 'Internet,' was set up to serve as an umbrella organization for all the centers, thus creating an ILC network.
- The BRIDGE Program in Lebanon has established a network of teachers that spans schools across the country, both in the private and public sectors. Over the past 3 years, the Program network has grown from 30 teachers to 80 teachers.

b. Sustainable Relationships

- Eighty percent of BRIDGE teachers and 62 percent of SCP teachers have continued professional collaborations that grew out of the Program.
- Fifty-four percent of the Master Trainers surveyed report that they have continued professional collaborations with those met during the Program.
- Substantial proportions of students, teachers, and Master Trainers in all of the Programs have remained in contact with people they have met during the Program: 76 percent of BRIDGE teachers; 71 percent of SCP teachers; 78.6 percent of Master Trainers; 82.4 percent of BRIDGE students; and 56 percent of SCP students.

c. Leveraging Resources: Collaboration with other Organizations

The synergy established through collaboration with other donors in these countries has been, and will continue to be, critical to the long-term sustainability of these activities and the transition to local stewardship. The Programs have leveraged resources – and continue to do so – in various ways. For example:

- ASCP has collaborated with the United Nations Development Program (UNDP) to establish and support four Regional Technology Centers (TeCes).
- TSCP approached CARE (an international NGO), at the outset, and decided to locate SCP schools in communities where CARE was already working, in order to leverage the groundwork CARE had done in promoting community involvement.
- UNICEF, UNDP, Merlin⁶ and Population Services International have all expressed interest in conducting trainings in Tajikistan's ILCs.
- TSCP also received some additional funding from the Hewlett Packard Foundation, the Global Catalyst Foundation, and the British Embassy in Tajikistan.
- The UNDP funded a BRIDGE classroom project in Lebanon, after a BRIDGE teacher established contact with a UNDP representative.

d. Community Fundraising and Action Plans

The sustainability of the SCP and BRIDGE Programs will depend – to a significant degree – on Program awareness among local communities and in Program countries. Awareness can generate or reinforce local community willingness and ability to raise funds for future activities.

- Approximately 74 percent of Master Trainers surveyed indicated that local funds have been raised to support Program activities.
- Fifty-seven percent of the Master Trainers anticipate that Program activities will continue after the current funding ends.
- Over half (52%) of the SCP teachers indicated that funds have been raised in the school or community to support Program activities. One-quarter of the BRIDGE teachers reported such fundraising activities.

⁶ Merlin is a U.K. based NGO that specializes in health care and medical relief for vulnerable people. They currently work in fifteen countries.

- Roughly 60 percent of the SCP teachers and one-third of the surveyed BRIDGE teachers affirmed that parent and communities groups had already formed to develop plans and/or raise funds for future Program activities.
- ASCP has organized approximately 20 one-day regional seminars for school Principals and ILC staff. Participants received instruction on the development of short-term action and promotional plans for the ILCs.
- Approximately 50 percent of SCP students and teachers reported making presentations to their communities as do 81 percent of BRIDGE teachers, 91 percent of BRIDGE students, and 79 percent of Master Trainers.

E. Conclusion

In addition to the findings above, the evaluation demonstrated that Program activities were often *interconnected and mutually reinforcing*, such that they achieved outcomes *across* multiple Program goals. Activities also achieved outcomes and had positive impacts that were either *unintended, in terms of the original Program design* (not the primary goals of a particular country or regional Program) or were *unanticipated prior to implementation*.

1. Select Outcomes Achieved Across Multiple Goals

- Activities designed to promote cross-cultural learning and mutual understanding *globally* reinforced those designed *specifically* to facilitate reconciliation and inter-ethnic collaboration in SEE.
- Program activities with different thematic emphases and goals dovetailed, and acted as catalysts for changes in students' self-perception, attitudes, and behaviors. For example, civic education activities that exposed students to the idea of activism and political participation worked in unison with new pedagogies that introduced students to critical thought and independent learning, and with virtual fora that allowed for independent expression of views. Students have been empowered by new knowledge of the democratic process, the value of social responsibility and political participation, and new skills. They have participated in and initiated new activities in their communities, regions and countries, and intend to take on leadership roles in the future.
- Augmenting English language capacity - whether by design, as in the BRIDGE Program, or less so, as in the other SCP Programs - supported the goals of building mutual understanding and cross-cultural learning. Indeed, English language skills determine *the extent* to which student and teachers are able to take full advantage of the opportunities to communicate and share insights and learning with individuals in other countries and regions, who speak other languages.
- Similarly, improvement in teachers' computer skills has enabled them to participate in an ever increasing number of Program activities and has facilitated and reinforced achievement in other goals areas, such as mutual understanding, civic education, and educational reform.

2. Select Unintended and Unanticipated Outcomes

- Activities, designed to promote mutual understanding, cross-cultural exchange and learning, and the idea of a “global citizenry,” have offered unique opportunities for dialogue and rapprochement across national borders and ethnic divisions, in regions where reconciliation was not an explicit Program goal.
- Participation in the SCP in SEE and Eurasia, where English language skills development was not a primary goal of the Program, generated significant improvement in students’ and teachers’ English language skills. Additionally, having access to the Internet, across all regions, had a considerable impact on students’ motivation to learn English.
- The Program has had an unanticipated impact on gender parity in education in Tajikistan. The Program has made “in-roads,” crossed the digital and technological divides, and provided those lacking access to information and resources new opportunities for learning and education. The girls’ participation in Program activities and fora, experience working collaboratively, and new skills have given them a “voice.” Girls currently in the Program and its alumnae are relying on these experiences and tools as they initiate girls’ literacy projects in their individual communities, regions, and the country. Experiences gained from the Program will enable female participants to take their place in the Tajik economy and polity.

As educational reforms take hold in classrooms – with new pedagogies, new methodologies, integrating IT into teaching, and collaborative learning, students are increasingly engaged in independent work, learn critical skills, and are no longer strangers to the benefits and opportunities afforded by globalization. As a result, these students recognize that they can be more autonomous actors, with more say in determining their educational and professional goals and the role they play in society, now and in the future.

Prepared for:
U.S. Department of State
Bureau of Educational and Cultural Affairs
Office of Policy and Evaluation
301 4th Street, S.W., Room 336 (SA-44)
Washington, D.C. 20547

By:
Aguirre Division of JBS International, Inc.
1156 15th Street N.W., Suite 1000
Washington, D.C. 20005

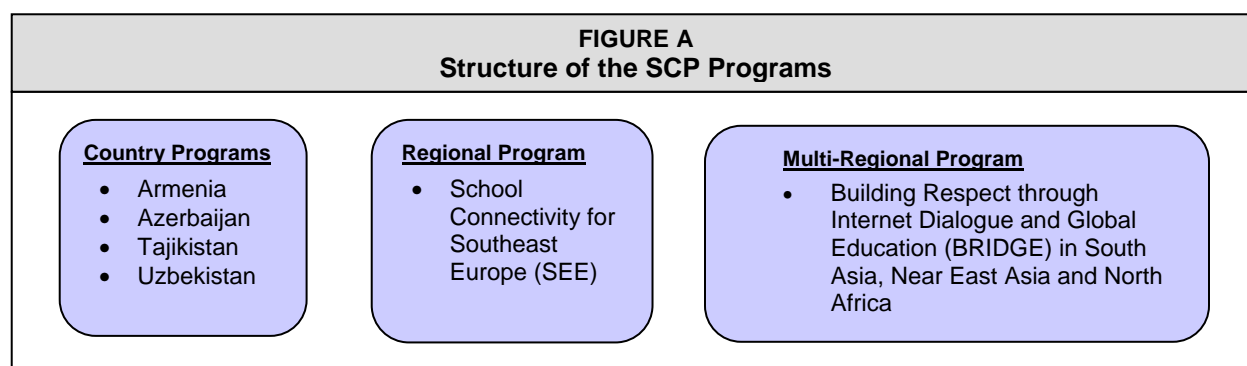
For a complete copy of the report, e-mail pdevaluations@state.gov.

1 THE SCHOOL CONNECTIVITY PROGRAM/BRIDGE EVALUATION

Chapter One

A. Introduction and Evaluation Overview

In November 2004, the Department of State's Bureau of Educational and Cultural Affairs Office of Policy and Evaluation (ECA/P) awarded Aguirre International (now the Aguirre Division of JBS International, Inc.) a contract for an evaluation of the six School Connectivity Programs operating in 22 countries. The structure of the six School Connectivity Programs is illustrated in Figure A.



All of the School Connectivity Programs are managed by the Office of Citizen Exchanges, Youth Programs Division (ECA/PE/C/PY), in the Department of State's Bureau of Educational and Cultural Affairs (ECA).

The School Connectivity Programs are not one cohesive Program. It is important to note that they have been funded at vastly different levels, in various parts of the world, through *multiple pieces of legislation*, with different goals and objectives. After the start of this evaluation, the Youth Programs Division consolidated its management of all School Connectivity Programs under the rubric of the Global Connections and Exchange Program (GCEP).⁷ *Differences in funding levels and Program goals have not changed, however.*

Like all programs in ECA, these School Connectivity Programs operate under the mandate of the Fulbright Hays Act (the Mutual Educational and Cultural Exchange Act of 1961). Its purpose is to increase mutual understanding between the people of the United States and the people of other countries, support educational and cultural exchange, and foster linkages between people in the

⁷ There are currently 18 countries in GCEP. Project Harmony is the grantee in Armenia and Azerbaijan. Relief International-Schools Online is the grantee in Afghanistan, Bangladesh, the Palestinian Authorities (West Bank) and Tajikistan. IREX is the grantee in Turkmenistan and Uzbekistan. iEARN-BRIDGE is the grantee in Bahrain, Egypt, Indonesia, Iraq, Lebanon, Morocco, Oman, Pakistan, Syria and United Arab Emirates (UAE). Information on GCEP can be found at <http://exchanges.state.gov/education/students/worldwide/connections.htm>.

United States and overseas and between U.S. institutions and those overseas. In addition, the School Connectivity Programs in Eurasia were originally funded under the FREEDOM Support Act (FSA), which supported economic and democratic reform and development in the independent states of the former Soviet Union. The School Connectivity Program in Southeast Europe (SEE) was funded through the Support for East European Democracy (SEED) Act and designated as a Stability Pact project, to help stimulate the development and use of Information Technology (IT) in SEE, to create an enabling IT environment, and to foster the use of IT in education.

The purpose of the Programs is to integrate access to the Internet with cutting edge approaches to teaching, instruction, and learning. The Programs provide selected schools and new Internet Learning Centers (ILC) with computer equipment and Internet connectivity, create fora and arenas for project-based and collaborative learning, and establish online partnerships among schools within individual countries and regions, with the United States, and internationally. They offer intensive technical, pedagogical, and educational training programs. In this way, they serve as mechanisms for educational reform, fostering cross-cultural learning and mutual understanding, enhancing educational capacity and professional development, as well as supporting civic education, conflict resolution, and English-language instruction. In addition, SCP and BRIDGE Programs connect schools in the United States with schools in participating countries, through online ties and limited physical exchanges, to facilitate the exchange of ideas and act as a catalyst for future online, collaborative activities.

This introductory chapter presents:

- The Purpose of the Evaluation;
- An Overview of the Six Connectivity Programs;
- A Brief Overview of the Methodology; and
- A Guide to the Evaluation Report and Its Structure.

B. The Purpose of the Evaluation

Most broadly, this evaluation serves several integrated purposes:

- To assess the effectiveness of ECA School Connectivity Programs (including the BRIDGE Program) in meeting Program, ECA, and State Department goals;
- To identify which SCP components play essential roles in achieving these goals, both across Programs and in specific country and Program environments;
- To determine the effectiveness of current models of, and approaches to, SCP Program design, content, and implementation; and
- To ascertain the value of Programs which rely on recent technological innovations and emphasize virtual programming, training, activities, participation, and exchanges.

Specifically, the evaluation examines the following four goals common to all of the School Connectivity Programs.

1. To determine whether the Program has increased understanding between U.S. citizens and communities and citizens and communities overseas, as well as among countries, regionally and internationally.
2. To assess the extent to which the Program has catalyzed and assisted educational reforms, including the adoption of new teaching pedagogies, new project-based learning (PBL), collaborative learning, the use of technology in the classroom, and the development of new curricula that integrate new technologies.
3. To ascertain whether teachers, students, trainers, and Program staff have developed relevant skills and knowledge, and whether a multiplier effect has facilitated both the dissemination of knowledge and skill acquisition among others *not* participating in the Program.
4. To determine whether the Programs have laid the groundwork for sustainability, in terms of resources, activities, and linkages.

The evaluation also examines those School Connectivity Program goals emphasized in particular country Programs:

1. To determine the effectiveness of SCP in supporting civic education, community building, and community service in the Programs in Eurasia;
2. To ascertain the effectiveness of SCP as a mechanism for reconciliation and regional stability in SEE; and
3. To determine the effectiveness of BRIDGE Programs in supporting English language teaching in the Middle East, North Africa, and South Asia.

C. Program Overview

ECA's Youth Programs Division provides grants to domestic organizations and agencies to administer and implement each of the School Connectivity Programs. Project Harmony implements School Connectivity Programs in Armenia and Azerbaijan. Relief International-Schools Online (RI-SOL) implements the Tajikistan Program. iEARN is responsible for implementing the BRIDGE Program in the Middle East, North Africa, and South Asia, as well as the School Connectivity Program in Uzbekistan (as a sub-contractor to IREX). Until the conclusion of the project in 2005, Catholic Relief Services (CRS) administered the Southeast Europe (SEE) Connectivity Program.

1. Armenia, Azerbaijan, Tajikistan and Uzbekistan School Connectivity Programs

The School Connectivity Programs in Eurasia were initially funded under the FREEDOM Support Act, which sought to develop democratic reform in the countries of the former Soviet Union. For this reason, these Programs have a strong focus on civic education and share the following goals:

1. Provide access to the Internet;
2. Provide training and resources to improve the teaching of civic education;
3. Generate linkages with schools in the United States and elsewhere; and
4. Make the Internet Learning Centers self-sustaining.

Each Program emphasizes the development of technical skills among administrators, teachers, students, and community members and the integration of the use of information technology (IT) into the curriculum. It was and is important to ECA that the Programs reach a diverse group of students, including those with special needs. The Program establishes an Internet Learning Center (ILC) at each participating school and supplies them with computer equipment, an Internet connection, technical support staff, and training. Both Programs in Armenia and Tajikistan have partnered with civic-oriented NGOs in their respective regions to administer online projects and develop curricula, and with technical NGOs to establish and maintain a network of ILCs in these countries.

2. Armenia Connectivity Program

Established in 1995 and administered by Project Harmony, the Armenian School Connectivity Program (ASCP) is the oldest and largest of all School Connectivity Programs. It has connected 326 schools and has a Mobile Computer Lab, which serves 21 remote communities. ASCP schools have participated in “virtual” exchanges with approximately 24 U.S. schools on a variety of civics-related topics.

ASCP is structured so that each region in Armenia is served by a Regional Field Coordinator team that includes Regional Education Coordinators (RECs)⁸ and Regional Community Developers (RCD).

- RECs provide training and support to school educators, helping them to implement online projects with a civic-education focus.
- RCDs are responsible for projects that build strong school-community ties.

The ASCP has taken a “train-the-trainer” approach, with RECs traveling to the United States to attend training on the general use of computers, the Internet, and how to use the Internet to gather information related to civic education and other themes and topics central to the Program. The RECs then train teachers, who train students. Teachers and students work together to create online projects around civics-related topics, often involving a U.S. partner school. ASCP has also brought Armenian school principals to the United States for leadership training. U.S. educators have been sent to Armenia to conduct workshops for civic educators on how to integrate technology-based activities into their curriculum.

Project Harmony has partnered with an Armenian NGO, Harmony Foundation, for technical assistance and maintenance of the ASCP school ILC network. Harmony Foundation is responsible for the technical training of the school ILC site staff. The ILC site coordinator then trains both teachers and students at the SCP schools in basic computer skills.

3. Azerbaijan Connectivity Program

Established in 2001, this School Connectivity Program is administered by Project Harmony. It provides secondary schools in Azerbaijan with Internet access, technical equipment, training, and support in maintenance of its ILC. As part of the Program, Azerbaijani schools partner with high

⁸ The Regional Education Coordinators have been phased out after playing the role described here.

schools in the United States to develop online collaborative learning projects, again, on themes related to civic education. In addition, Caucasus-wide project work and online events explore regional issues of education reform, democracy building, and cross-cultural awareness and appreciation.

4. Tajikistan Connectivity Program

The Tajikistan School Connectivity Program (TSCP) began in 2003. Administered by Relief International (RI-SOL), the TSCP is much smaller in scale than Armenia, with only 24 connected schools. The Program originally began with ten schools, and then quickly added more (ten in the spring of 2004 and four at the end of 2004). Internet connectivity and use in Tajikistan are generally low because of the lack of Internet service providers due to the country's low level of economic development and rugged landscape. Many Tajiks are unfamiliar with the Internet, which has led the Program to place a strong emphasis on training.

The TSCP trains Master Trainers in the subjects of Internet use and research, American studies, English language, civics, curriculum and collaborative teaching methodologies. The Master Trainers are then responsible for training teachers in these subjects. Once a teacher has concluded his or her training, s/he becomes a Lead Teacher, and is required to provide at least 25 hours per semester of training to teachers and students at his/her school. Civic education NGOs also contribute by training teachers on specific aspects of civic education. Each school ILC also has a site monitor on staff to deal with technical problems and act as a liaison between the school administration and RI-SOL. TSCP supports reciprocal exchanges of teachers between Tajikistan and the United States.

5. Uzbekistan Connectivity Program

The School Connectivity Program in Uzbekistan was established in 2003 and is administered by IREX and implemented by its sub-contractor, iEARN. It operates in secondary schools in six targeted regions across Uzbekistan. Providing Internet access links the students in Uzbekistan with other students in the region, most notably Tajikistan, and internationally, and enables them to participate in structured, online activities aimed at promoting mutual understanding and community building. In addition, the Program assists teachers and school administrators in introducing critical thinking activities and student-centered teaching methodologies into the classroom. iEARN facilitates online collaborative activities. The Tashkent Public Education Center has been involved in elements of curriculum development.

6. School Connectivity Project for Southeast Europe

Begun in 2002 as a Stability Pact Initiative, the SCP for Southeast Europe (SEE) promoted further understanding among youth in the region, and was supported by the Fulbright-Hays Act and the SEED (Support for East European Democracy) Act. U.S. funding for the SCP in SEE ended in 2005.

CRS administered the Program, which was active in Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Romania, Serbia, Montenegro, and Kosovo. Ninety-two schools were

involved in the project, with almost 1,986 students and 304 teachers participating since its inception.

CRS designed the country Programs in order to reach these specific goals.

1. To increase inter-ethnic dialogue among schools in Southeast Europe and the United States via the use of Internet technology; to give students critical and analytical skills so that they can determine for themselves whether the media and society portray other groups with some bias/incorrectly.
2. To develop more fully the mutual understanding between American and Southeast European schools, through multiple linkages.
3. To facilitate joint learning and project work through communication.
4. To generate personal and institutional ties among students, educators, and schools across borders, through communication technologies.
5. To provide teachers with the tools and support network necessary to continue developing courses of study that incorporate web-based learning into other education subjects and situations.

Celebrating diversity was a major emphasis, given the conflict resolution orientation of the Program, and also the topic of many activities under this project. Activities included building school partnerships and networks, establishing computer centers in SEE schools, teacher training, joint student projects relating to Stability Pact goals, online exchanges, and youth seminars.

7. Building Respect through Internet Dialogue and Global Education (BRIDGE)

Since its inception in 2002, the BRIDGE Program has created nine School Connectivity Programs in the Middle East, North Africa, and South Asia.⁹ The goals of the Program are the following.

1. To build understanding between U.S. citizens/communities and citizens/communities overseas participating in the Program, and among countries, regionally and internationally.
 - To generate personal and institutional ties, across borders, among students, educators, and their schools.
2. To catalyze and assist educational reforms, including project-based learning, collaborative learning, and using technology in the classroom.
 - To improve educational tools, resources, and learning through the application of information technology, complementary teacher training, online resource development, school partnerships and student collaboration.
3. To develop skills and knowledge for teachers, students, regional coordinators, trainers and other participants.

⁹ BRIDGE programs are present in Algeria, Egypt, India, Jordan, Lebanon, Morocco, Pakistan, Syria, and Tunisia.

4. To support and enhance English instruction.
5. To build sustainability in terms of resources, activities and linkages.

Activities include establishing ILCs, provision of professional training for teachers, development of pedagogical materials, regional conferences, collaborative student projects, and exchanges between students and teachers from schools in the United States and partner countries.

D. Brief Overview of the Evaluation Methodology

Given the large number of countries, overall, in the School Connectivity Programs (22 countries total), ECA/P and the Aguirre Division of JBS International designed a methodology that combined the strategic choice of qualitative case studies with quantitative surveys of Program participants, non-participants and community members (as feasible). The four countries selected for case studies and site visits were Armenia, Bosnia and Herzegovina, Tajikistan, and Lebanon.

Several criteria served as basis for selection:

- Regional and School Connectivity Program representation (i.e., one country from each regional Program);
- Program history, duration/age, and size;
- Grantee (i.e., four country Programs implemented by four different grantees); and
- Country conditions that enable the evaluation team to gain an understanding of the effectiveness of the School Connectivity Programs in different economic, political, institutional, and geographic environments, with different levels of Internet penetration and access.

Armenia is the oldest SCP Program and has the greatest number of ILCs and participating schools (270) in all of the country's *marzs* (sub-regional administrative units). Because the Program in Armenia is so large, it provides access to three-quarters of the sites in the Caucasus region. In addition, the IT infrastructure in Armenia was lacking at the start of the Program, so this case study serves as a good example of the groundwork involved in terms of establishing a network of schools and ILCs, as well as the challenges in terms of maintenance after U.S. funding ceases. Armenia is one of the two countries in which Project Harmony implements SCP activities.

Tajikistan is the only country among the Central Asian republics chosen for the evaluation and it was the newest of the SCP country Programs in 2004, when the evaluation began. This Program has benefited from some of the lessons learned in the other country Programs, and so offers an interesting context for the evaluation of SCP activities, as they have evolved. The circumstances in Tajikistan contrast strongly with those in Armenia, in terms of its political openness and progress of reforms. In Tajikistan, RI-SOL manages the Program.

Among the countries of SCP in SEE Program, Bosnia and Herzegovina had a small number of participating schools (10), which facilitated site visit coverage of the participating schools. This country, in particular, provided a good context in which to assess the SCP in SEE activities and the effectiveness of its conflict resolution strategies, given Bosnia and Herzegovina's recent

history, attempts at reconciliation, and remaining ethnic tensions and divisions. CRS administered this SCP Program.

Lebanon represents the BRIDGE Program countries. While Lebanon has a history of foreign language instruction in the schools (French and English), the use of Internet-based curriculum and online collaborative learning projects is not widespread. This provides a solid baseline against which to evaluate the impacts of Program activities. iEARN is responsible for the BRIDGE Program in Lebanon, and it has a very strong regional and country coordinator, who is specifically trained in online education. She has been instrumental in developing teacher training workshops that are used throughout the BRIDGE Program country network. Given the strength of Lebanon's Program – and the leadership role it has taken – the Program offers insights into future possibilities and directions for the BRIDGE Program within the iEARN network. In addition, Beirut was the site of a regional iEARN conference, which brought together BRIDGE participants to share their experiences in the Program and present their online collaborative projects.

In addition, eight other countries are represented in the online surveys of students, teachers and Master Trainers, bringing the total number of Program countries assessed to twelve. The SCP Program countries in the evaluation are: Albania, Armenia, Bosnia and Herzegovina, Croatia, Macedonia, Serbia-Montenegro, Tajikistan, and Uzbekistan. The BRIDGE Program countries represented are: Jordan, Lebanon, Morocco, and Pakistan.

The primary data sources for this evaluation are:

- Background, web-based research on individual country Programs;
- Open-ended interviews with U.S.-based and in-country grantee organization staff;
- Site visits to SCP and BRIDGE ILCs and schools in Armenia, Bosnia and Herzegovina, Lebanon, and Tajikistan;
- Open-ended interviews with school principals and ILC staff;
- Transcripts from focus groups and notes from informal discussions with Program participants (students, teachers, Master Trainers and community members);
- Online surveys available in several languages¹⁰ for the students, teachers, and Master Trainers in 12 countries;
- An online survey of community members in Tajikistan; and
- Face-to-face interviews with similar students from comparison schools in Armenia, to obtain quantitative data for a comparable group of students who did not participate in the Program (see Appendix D).

The Aguirre Division of JBS International, Inc. partnered with the Armenian Sociological Association in Armenia, PRISM Research in Bosnia and Herzegovina, the Amr Group in Lebanon, and M-Vector in Tajikistan. Aguirre, or its in-country partners, conducted the site visits in schools in Armenia, Bosnia and Herzegovina, Lebanon, and Tajikistan.

¹⁰ Online surveys were available in: Albanian, Arabic, Armenian, Bosnian, Croatian, English, Macedonian, Serbian, Russian, Tajik, Urdu, and Uzbek.

E. A Guide to the Evaluation Report and its Structure

This evaluation report has five major sections:

1. Methodology;
2. Key findings and analysis from the individual country case studies;
3. Key findings and analysis of the online survey data;
4. Analysis of Program multiplier effects and Program sustainability; and
5. Conclusions and Recommendations.

School Connectivity case studies of Programs in Armenia, Lebanon (BRIDGE Program), Tajikistan, and Bosnia and Herzegovina (SCP for SEE) are presented first, followed by the results from the online surveys of Program participants (students, teachers, and Master Trainers).

For each case study chapter, the key findings from the outcome assessment are summarized first, organized according to common goals and regionally-specific goals. The main body of each chapter offers a detailed discussion of the country Program and its activities, and an outcome assessment analyzing how well the Program is achieving programmatic, ECA, and State Department goals.

The online survey chapters (students, teachers and Master Trainers) are organized in a similar fashion, with the key findings presented up front, followed by a description of the survey participants, and an analysis of survey findings. Each chapter then concludes with summary observations across each of the Program goals.

A chapter on Multiplier Effects and Program Sustainability follows the online survey chapters. This chapter explores the *various ways* participants share the knowledge and skills gained in the Program with colleagues, peers, and others in their communities and beyond, and the types of skills they share. The second part of this chapter examines the different strategies employed by implementers to ensure various aspects of Program sustainability, once U.S. government funding ends. Comments taken directly from Program participants are showcased to reveal some of the inherent challenges that individual programs face, as well as the steps taken to confront them, when possible.

Finally, the Conclusions and Recommendations chapter examines the effectiveness of all the country Programs and their impacts by Program goal, using both the qualitative, country case study data and quantitative, online survey data. Recommendations for Program effectiveness, success, and sustainability are provided.

2

EVALUATION METHODOLOGY

Chapter Two

A. Introduction

To examine the various goals discussed in the previous chapter, the evaluation team, in consultation with ECA/P and ECA Program Officers, identified key outcomes in each goal area. Using these as a guide, Aguirre formulated key outcome assessment questions for the various focus group protocols, site visit protocols, online questionnaires, and other instruments developed for data collection.

The evaluation instruments collected data on the following goals and outcomes.

1. To Build Mutual Understanding

Students and educators in SCP/BRIDGE schools will interact with other SCP/BRIDGE students and educators in their own regions and in the United States.

- Demonstration of cultural awareness and tolerance of others;
- Cross-cultural learning resulting from online activities that discuss or examine other cultures;
- Changes in views of the United States and cultures of partner school countries; and
- Virtual connections between participants of different cultures are established and maintained.

2. To Catalyze and Assist in Educational Reforms

SCP/BRIDGE schools adopt new teaching methodologies or new educational policies.

- Change in the culture of the classroom (student-oriented, collaborative);
- Change in student attitudes and behaviors in the classroom;
- Integration of online fora and projects in classroom activities and lessons;
- Use of IT in classroom activities and lessons;
- School administration supports use of IT in the classroom; and
- Introduction of school-wide policies to promote use of IT in the classroom.

3. To Develop Skills and Knowledge

SCP/BRIDGE grantees will train secondary school teachers and students on computer use, Internet, and instructional applications.

- Improvements in computer skills;
- Teachers and students learn to use new computer applications;
- Teachers and students train to use the Internet to identify educational resources;

- Improvements in participant self-assessment of computer skills;
- Use and reliance on the Internet increases with access; and
- Increases in student confidence and self-esteem.

4. To Build Sustainability

SCP/BRIDGE materials and activities will be relevant or sustainable after the completion of grants.

- Strength of country Program implementation;
- Evidence of fundraising activities in the community;
- Evidence of community outreach;
- Dissemination of information on Program activities in the community;
- Evidence of future plans for ILCs and continuation of Program;
- Knowledge sharing among participants and with others outside Program;
- Sharing of skills among participants and with others outside Program; and
- Evidence of participant initiative to continue with online activities or build upon them.

5. To Support Reconciliation and Regional Stability

Participating teachers and students will support regional stability and reconciliation through dialogue in the SCP Programs in Southeast Europe.

- Exposure to others from different ethnic groups or countries in the region;
- Activities that share cultural information among participants of different ethnic and cultural backgrounds;
- Cooperative projects among participants from different countries or ethnic groups;
- Teachers adapt new skills in facilitating interpersonal communication and inter-ethnic dialogue; and
- Forum discussions on conflict resolution.

6. To Support Civic Education

Participating schools and SCP grantees will develop or update civic education curricula and participate in community building activities.

- Civics education curriculum developed and implemented;
- Online resources for civic education developed;
- Changes in student attitudes toward democracy;
- Online fora or collaborative projects in civics are prominent;
- Community service activities; and
- ILCs are used for community building activities.

7. To Support English Language Instruction

Participating schools and BRIDGE grantees develop new English language curricula or use electronic resources to update existing curricula.

- English used in the online Program activities;

- New English language curriculum;
- Use of the Internet to develop new English language curriculum or update existing English curriculum;
- Improvement in the English language abilities of Program participants;
- Increased student interest in learning English; and
- Impact of English language instruction on other coursework.

B. Methodologies

In order to capture all the information necessary for the outcome assessment, the evaluation employed several different data collection strategies. Four countries (Armenia, Bosnia and Herzegovina, Lebanon, and Tajikistan) were selected for in-country site visits and online surveys.

ECA/P and Aguirre decided to conduct case study work on school connectivity in these four country Programs, based on the following selection criteria:

- Regional and School Connectivity Program representation (i.e., one country from each regional Program);
- Program history, duration/age, and size;
- Grantee (i.e., four country programs implemented by four different grantees); and
- Country conditions that enable us to gain purchase on the effectiveness of School Connectivity Programs in different economic, political, institutional, and geographic environments, with different levels of Internet penetration and access.

In addition to these four countries, eight other countries were included in Internet-based surveys: Albania, Croatia, Jordan, Macedonia, Morocco, Pakistan, Serbia-Montenegro, and Uzbekistan. In total, participants in 12 countries took the self-administered Internet-based survey.

Aguirre partnered with the Armenian Sociological Association (ASA) in Armenia, PRISM Research in Bosnia and Herzegovina, the Amr Group in Lebanon, and M-Vector in Tajikistan. Site visits, focus groups and open-ended interviews with key informants (teachers, school principals, Program staff and students) were generally conducted during field visits.

The evaluation relied on eight different data collection strategies:

1. *Self-Administered Internet-based Surveys for SCP and BRIDGE Program Participants:*
 - An Internet-based survey of participating students, in local languages, in Albania, Armenia, Bosnia and Herzegovina, Croatia, Jordan, Lebanon, Macedonia, Morocco, Pakistan, Serbia-Montenegro, Tajikistan, and Uzbekistan;
 - An Internet-based survey for classroom teachers, in local languages, in Albania, Armenia, Bosnia and Herzegovina, Croatia, Jordan, Lebanon, Macedonia, Morocco, Pakistan,¹¹ Serbia-Montenegro, Tajikistan, and Uzbekistan;

¹¹ Most teachers, students, and Master Trainers in Pakistan elected to take the English-language version of the online surveys, as many respondents found the Urdu translation to be awkward.

- An Internet-based survey for Master Trainers, in local languages, in Armenia, Bosnia and Herzegovina, Jordan, Lebanon, Morocco, Pakistan, Serbia-Montenegro, Tajikistan, and Uzbekistan;
 - An Internet-based survey of community users of the school ILCs in Tajikistan, in the local language.
2. *Face-to-Face Interview for Comparison Group of Non-Participating Students:*
 - A face-to-face survey of same-aged youth in comparison schools in Armenia. An interviewer recorded the survey responses on the interview schedule.
 3. *Site Visits to SCP and BRIDGE Schools:*
 - Site visits to participating schools and ILCs in Armenia, Bosnia and Herzegovina, Lebanon, and Tajikistan;
 - Site visits to the U.S. partner schools for specific schools in Armenia, Bosnia and Herzegovina, Lebanon, and Tajikistan.
 4. *Group Discussion and Focus Groups with SCP/BRIDGE Participants:*
 - Group discussions and focus groups with teachers, trainers and students (each separately) in Armenia, Bosnia and Herzegovina, Lebanon, and Tajikistan.
 5. *Key Informant Interviews with In-country School Staff:*
 - Unstructured interviews with school principals and ILC staff.
 6. *Key Informant Interviews with U.S. Partner School Staff:*
 - Unstructured interviews with U.S. partner school staff (principals, teachers, as well as students, when available) in Florida, Colorado, Maryland, and Washington D.C.
 7. *Key Informant Interviews with U.S.-based and In-country-based Staff of Grantee Organizations:*
 - Unstructured, in-depth interviews with key staff of U.S. grantee organizations to explore Program objectives and goals, the processes they used for working with partner organizations, and their views on outcomes, successes and challenges.
 8. *Web-based Research on Country Programs:*
 - Extensive web-based research was conducted on the grantee websites, in order to construct a picture of country Program structure, and to provide detailed descriptions of in-country Program activities and the substantive content of online fora.

1. Initial Contact Strategy

ECA informed the U.S. grantees in November 2004 that Aguirre had been selected to conduct an evaluation of the SCP and BRIDGE Programs. Aguirre then contacted each project director and arranged for meetings with their U.S.-based staff to discuss the Program and to establish a timetable for field visits. The grantees then informed their regional and country coordinators of the upcoming, in-country site visits. The non-participants in Armenia received no advance information about the evaluation. Aguirre worked closely with ASA to determine the selection criteria for the comparison group of students. ASA contacted the schools directly to secure permission to interview the students and make the appropriate arrangements.

2. Online Surveys

Each of the Program implementers maintained their own participant records for students, teachers, Master Trainers, and in some cases, community members who used the school's ILC. Given the varying length of the Program in each country and the differing usage policies within the schools, Aguirre decided to make the online survey available to *all users* who could be captured during a one-month period. (An exception was made for the Arabic language survey, which was online for a longer period of time).

Aguirre determined an online survey to be the best method for collecting data from the participants of Programs intended to provide Internet connectivity to a large number of users. Aguirre sent survey links to CRS, iEARN, Project Harmony, and RI-SOL to post on their websites, and SCP and BRIDGE fora. Participation in the survey was voluntary. Altogether, 1,097 students, 645 teachers, 109 trainers, and 296 community users registered on the survey link and began the survey over the four weeks it was made available in each country. Although providing the survey in 12 different languages was challenging, Aguirre is confident that many more responses were received via the Internet than could have been obtained in person or by mail. With the exception of the online teacher's survey, survey completion rates were approximately 50 percent or greater (see Table 2.1 for details). Only those surveys where half or more of the questions were answered were considered complete and used in the subsequent analyses.

TABLE 2.1 Online Survey Completion Rates ¹²		
Participants	Number	Completed at Least Half the Survey
Students		
Started the survey	1,097	
Completed 50% or more	762	69.46%
Teachers		
Started the survey	645	
Completed 50% or more	254	39.38%
Master Trainers		
Started the survey	153	
Completed 50% or more	87	56.86%
Community Members		
Started the survey	296	
Completed 50% or more	145	48.99%

a. Data Instruments

Aguirre evaluators designed survey instruments for students, teachers, Master Trainers, community users, and non-participants, in addition to focus group protocols. These instruments were reviewed, revised, and approved by ECA/P and Program staff. Pilot tests were conducted in March 2005 in Armenia and Serbia. Based upon the results of the pilot test, appropriate revisions to the draft instruments were made. Aguirre's in-country partners also reviewed the

¹² The survey completion rate is the percentage of people who have completed at least 50 percent of the questions on the survey after starting the survey (i.e., registering and then moving to the next question/page view).

questionnaires, made recommendations for improvement, and translated the instruments into the country's official language, as detailed below.

The number of questions in the survey varied depending on the Program and participant group. The amount of time required to complete the surveys also varied based on the level of involvement with the Program, speed of Internet connection, and an individual's preference for extended answers in the open-ended questions. Table 2.2 shows the number of items in each survey and the average completion time for each survey. The survey instruments can be located in Appendix B.

TABLE 2.2 Length of Online Survey Instruments		
Survey Instrument	Number of Items	Average Completion Time (in Minutes)
SCP Student Survey	106	17
BRIDGE Student Survey	108	38
SCP Teacher Survey	145	46
BRIDGE Teacher Survey	150	53
Trainer Survey	124	35
SCP Community User Survey	86	22
<i>Note: The BRIDGE Program instruments had a larger exchange component and English Language Instruction component than did the SCP instruments.</i>		

The online surveys were conducted in the official language of the country; versions of the online surveys were available in: Albanian, Arabic, Armenian, Bosnian, Croatian, English, Macedonian, Serbian, Russian, Tajik, Urdu, and Uzbek.

3. Interviews with Comparison Group of Students

In Armenia, 250 students *not participating* in the Program were interviewed face-to-face to serve as a comparison group. These students were selected from non-participating schools, since, in Armenia, school ILCs are generally available to all the students in participating schools. Using an interpreter, interviews were conducted in Armenian. The instrument used for this interview was similar to the instrument used for the online surveys (see Appendix B for protocols).

4. Site Visits

a. In-country Schools

During field work, the evaluation team conducted a total of 36 site visits to participating schools in Armenia (12), Bosnia and Herzegovina (4), Lebanon (7), and Tajikistan (13). Open-ended interviews were conducted with school administrators and Program directors, and focus groups and informal discussions were held with teachers and students. Site visits were made to schools in the capitals and in smaller, regional cities and towns. In Armenia, for example, the evaluation team visited a participating school in each *marz* (sub-regional administrative unit) and two in Yerevan for a total of 12 site visits. The evaluation team also visited schools in Bosnia and Herzegovina. In Lebanon, schools were selected from a wide geographic area, including Beirut, as well as schools in the north (e.g., Koura) and in the south of Lebanon (e.g., Saida). Table 2.3 provides details of the site visits.

TABLE 2.3
School Site Visits

Country	Location of Site Visits*	Number of Site Visits
Armenia	Artik, Ashtarak, Echmiadzjn, Hrazdan, Ijevan, Kapan, Masis, Mobile Lab in Gegharkunik marz, Vanadzor, Yerevan	12
Bosnia and Herzegovina	Bugojno, Dobo, Mostar, Travnik	4
Tajikistan	Dushanbe, Guissar, Kurgan, Shakhriyav, Sarband, Vakhsh, Gulakandoz, Chkalovsk, Kanibadam, Kayrokkum, Isfara	13
Lebanon	Abassieh, Bsalim, Beirut, Koura, Saida, Tripoli	7

* In some cities more than one school was visited.

b. U.S. Schools

In addition to the 36 site visits in the four target countries, the evaluation team visited six U.S. schools participating in the Program – one partnering with CRS in Southeastern Europe, two partnering with Project Harmony in Armenia, one partnering with iEARN in Lebanon, and two partnering with Relief International in Tajikistan. These schools were in Colorado, Florida, Maryland, Virginia, and Washington, D.C. Aguirre staff met with school principals, teachers, and students to hear their perspectives on the Program. The site visit protocol can be found in Appendix B.¹³

5. Focus Groups

The evaluation team conducted 21 focus groups in four countries: Armenia (6), Bosnia and Herzegovina (7), Lebanon (4), and Tajikistan (4).¹⁴ Focus groups were conducted by four local partners. Aguirre evaluators observed at least some of the focus groups in each country. In the case of Lebanon, Aguirre staff conducted several of the focus groups. Each of the focus groups was audio recorded, then transcribed, and summarized in top-line reports by Aguirre staff or in-country partners. The focus groups provided information that clarified anomalies in the survey data and furnished details regarding the impact the Program has had on participants, community members, and partner organizations. The focus group protocols are in Appendix B.

6. Open-ended Interviews with Key Informants

Aguirre staff conducted initial interviews with U.S. based staff of the five U.S. grantees—Catholic Relief Services, iEARN, IREX, Relief International and Project Harmony—to gather information about each Program and how it operates. The evaluation team also met with Program staff and participants in a variety of venues during the fieldwork period. Aguirre Division staff participated in interviews and briefings with Public Diplomacy Sections of the U.S. Embassies in Serbia, Bosnia and Herzegovina, Lebanon, Armenia, and Tajikistan. These interviews focused on Program goals and objectives, implementation, views of Program success and challenges, as well as opinions and information on the activities and views of participants.

¹³ An Internet-based survey designed for U.S. teachers and students who had participated in the Program had a limited response rate and so the quantitative data obtained were deemed to be non-representative of these groups. However, the qualitative data gleaned from answers to open-ended questions are indicative and illustrative of teacher and student views, as noted during the site visits, and so are used in discussions of program impact on U.S. teachers and students.

¹⁴ In Tajikistan there were informal discussions, not formal focus groups.

7. Web-based Research of Country Programs

Extensive web-based research was conducted: 1) to corroborate information gathered in open-ended interviews and focus groups; and 2) to construct a clear picture of the structure and activities of the individual country Programs. For example, grantee websites provide information on teacher exchanges, conferences, online classes, online fora, and community service activities. In addition, some implementers provided evaluators with quarterly reports for the School Connectivity Program, and these reports provided useful information concerning activities in the individual countries, as well as insights of some of the challenges faced. Grantee websites can be found in Table 2.4 and are referenced throughout the report, when information is taken directly from them.

TABLE 2.4 Grantee Websites		
Country	Grantee	Website
Armenia	Project Harmony	www.ascp.am ; www.hf.am
Bosnia and Herzegovina*	Catholic Relief Services	www.schoolconnectivity.net
Lebanon	iEARN	www.iEARN.org
Tajikistan	Relief International	www.connect-tajikistan.org
*Catholic Relief Services provided the evaluation team with a login name and password which is required on this site. The School Connectivity website is the portal for all of the Programs in Southeastern Europe.		

8. Summary of Data Collection Methods

Table 2.5 summarizes the data collection instruments and numbers of surveys administered, site visits, and focus groups conducted, by country.

TABLE 2.5 Summary of Data Collection Methods by Country							
Program	Surveys					Site Visits	Focus Groups
	Students	Non-participants	Teachers	Trainers	Community		
Armenia	213	250	101	20	--	12	6
Southeast Europe	103	--	37	1	--	4	7
Albania	36	--	7	0	--		
Bosnia and Herzegovina	4	--	8	0	--	4	7***
Croatia	33	--	8	0	--	--	--
Macedonia	28	--	12	0	--	--	--
Serbia-Montenegro	0	--	2	1	--	--	--
BRIDGE Countries	107	--	35*	5	--	7	4
Jordan	0	--	1	1	--	--	--
Lebanon	8	--	9	0	--	7	4
Morocco	13	--	5	2	--	--	--
Pakistan	81	--	19	2	--	--	--
Tajikistan	217	NA**	31	25	145	13	4**

Uzbekistan	110	--	50	36	--	--	--
United States	19****	--	0	0	--	6	0
Total	762	250	254	87	145	42	21
<i>* Note: One teacher from the Near East/Asia and 37 community users did not report their countries of residence.</i> <i>**Tajikistan was selected to participate in the non-participant survey, but the Ministry of Education refused to allow the survey to be administered.</i> <i>*** Informal group discussions were held in Bosnia and Herzegovina and Tajikistan instead of more formal focus groups.</i> <i>**** Nineteen of the SCP students reported that they currently reside in the United States.</i>							

Various data collection methods were employed in order to describe the country Program structures and activities, as well as to measure the SCP goals as outlined at the beginning of this chapter. The web-based research provides background and details concerning the activities in each of the four countries selected for site visits. Key informant interviews and site visits provide needed context and observation on the ground. The comments of students and teachers in focus groups provide in-depth qualitative information necessary to round out the description of the Program in the participants' own words. Finally, the quantitative online survey data provides a broad view of participant Program experiences and perceptions. The online surveys give insight into the impacts of the SCP Programs.

3 THE SCHOOL CONNECTIVITY PROGRAM IN ARMENIA

CIVIC EDUCATION AND COMMUNITY BUILDING

Chapter Three

A. Introduction

The School Connectivity Program in Armenia (ASCP) was established in 1995, in support of the FREEDOM Support Act. It was both the largest and oldest of the SCP Programs, and laid the foundation for the other Programs in Eurasia. In addition to immediate Internet access objectives in a country with marginal Internet access, this Program was designed to facilitate community building and provide civic education, as well as educational reforms.

This chapter provides a brief summary of key findings and an overview of the ASCP, charting its evolution, reviewing content and curriculum, teacher training and specific Program activities. It includes an assessment of its effectiveness in realizing specific State Department and Program outcomes. It provides insights on how the Program was established, then adapted to the institutional environment, and expanded during this period.

The chapter is based on **qualitative data**, including reviews of Program documents and websites, interviews with key informants, and findings from a site visit to Armenia.

Quantitative data on non-Program students is in Appendix C. The evaluation team conducted the site visit from May 14 to May 23, 2005.

B. Key Findings

1) *Mutual Understanding*

- Teachers and Master Trainers both expressed sentiments of mutual understanding and connection with the people they had met in virtual and physical exchanges. Cross-cultural learning was cited as a key aspect of this – nationally, regionally and internationally.
- Regional communication is particularly evident in the online interactions. Teachers are in communication with other schools in Azerbaijan, Russia, Chechnya and Turkey.
- The teachers who participated in the exchange to the United States say that they returned with very positive impressions of the United States and they feel they became acquainted with the U.S. educational system.
- Students develop formal and informal linkages with other students through the online activities. They use these to discuss both personal and project-related issues.

2) *Educational Reform*

- Teachers have introduced new teaching pedagogies into classroom activities – particularly, collaborative learning and the integration of computers and the Internet. They have done this in several subject areas, such as math, French, German, English, biology and geography.

- One highly noticeable change is in the transfer of the locus of action from the teacher to the student. Many teachers commented that they have begun to behave more as facilitators of the learning process, rather than as the sole source of information and learning in the classroom.
- As a result of changes in teaching methodologies introduced by the Program, students have become more self-directed in the learning process.
- Teachers have found that the new teaching methodologies introduced by the Program make class more interesting. Consequently, they report that students pay attention in class and are willing to devote more time and energy to schoolwork.

3) Skills Development

- The development of IT skills across the Program can be seen at the school level, where 195 schools in the ASCP network have started to create and currently continue to develop school websites.
- Computer skills of students and teachers alike have improved dramatically as a result of the Program.
- Teachers note that participation in the Program has positively affected the students' self-esteem.

4) Civics Education

- Project Harmony has developed an online library in Armenia that contains over 20 civics-based resources to enhance the civics curriculum.
- Project Harmony has partnered with another organization, Connected Minds, to design civics-based curriculum that addresses many topics (e.g., conflict resolution).
- ASCP has an Armenian language website that makes available lesson plans created to supplement the state civics curriculum for 8th, 9th, and 10th grades.
- Several of the online projects exposed students to the political process in Armenia and gave them direct access to individuals they might not normally meet (e.g., Armenian politicians).
- Participation in the online activities has changed student attitudes towards corruption – they have become less accepting and tolerant.

5) Community Outreach and Community Building

- Many of the Internet Computer Centers (ICCs) are used for activities that directly benefit the community:
 - a. Computer Training for Community Members;
 - b. Computer Training for the Unemployed; and
 - c. Computer Training to Staff and Teachers of Schools not in the ASCP Network.

6) Strength in Implementation

- One of the hallmarks of the ASCP has been its construction and maintenance of a vast network of ICCs in a country with a very limited IT infrastructure.
- Project Harmony's ability and foresight to partner with various organizations has enabled it to provide many different types of services and to focus on all the SCP Program objectives.

- Project Harmony has partnered with many entities, including:¹⁵
 - iEARN to deliver workshops on how to integrate IT into the classroom and how to design collaborative learning projects.
 - Connected Minds to design curricula.
 - United Nations Development Program (UNDP) to establish and support four Regional Technology Center (TeCes). It is expected that the TeCes will have video conferencing capabilities which will allow for cross-regional events.

C. Armenian School Connectivity Program (ASCP) Description

The School Connectivity Program in Armenia was established in 1995 and administered by American Council for Collaboration in Education and Language Study (ACCELS). In 1999, Project Harmony won the contract and has implemented the SCP Program in Armenia ever since. In order to implement the SCP in Armenia, Project Harmony first had to establish and maintain a network of Internet Computer Centers (ICCs) in schools throughout the country. In addition, they have built a Mobile Internet Computer Lab with a satellite connection which serves communities in remote areas cut off from other means of communication (i.e., the Internet).

The long term goals/outcomes of ASCP are:

1. To build understanding between U.S. citizens/communities and citizens/communities overseas participating in the Program, and among countries, regionally and internationally;
2. To catalyze and assist education reforms, including project-based learning, collaborative learning, and using technology in the classroom;
3. To develop skills and knowledge for teachers, students, regional coordinators, trainers and other participants;
4. To build sustainability in terms of resources, activities and linkages; and
5. To support civic education and community building.

The ASCP is structured around several components or activities:

1. Establishment and set-up of ICCs in the school;
2. Staff development;
3. Online activities: courses, chats and competitions;
4. Physical exchanges and school partnerships;
5. The creation of Armenian-language Internet resources; and
6. Outreach to the community.

1. School Internet Computer Centers (ICCs)

Armenia's Program is by far the largest, with approximately 326 schools in the network and a mobile lab that serves 21 remote communities. The breadth and reach of the Program are evident – the network accounts for almost 25 percent of *all* secondary schools in Armenia. SCP schools

¹⁵ See Appendix A: ASCP Partner Organizations for a complete list of principal partners of Project Harmony.

are located in all 11 marzs (sub-regional administrative units) of Armenia, with extensive coverage of rural Armenia.

In addition to regional coverage, the ASCP strives to include diversity in its student/school population as well. Currently there are 19 Special Needs Schools and 13 Specialized Schools in the SCP network. The population of the special needs schools in most cases is divided between socially vulnerable groups (orphans, children deprived of parental care, homeless children, etc.) as well as children with special needs (blind or visually impaired, hearing impaired, speech disabilities, mentally disabled, or other physical disabilities).

a. Current Program Activity Levels

The level of active participation is a critical aspect of the Program. Every quarter, Project Harmony posts on its website participation statistics which reveal the extent of active participation. While these numbers are not easy to interpret (i.e., we do not know exactly what they are doing when engaged in “online activities”), they do provide some insight into the *level of activity in any given quarter*. Table 3.1 outlines student, teacher, and community activity levels for the period of October through December 2005.

TABLE 3.1 October – December 2005 Quarter Program Beneficiary Participation Statistics*		
Total # of ICCs operating	324**	24 schools without Internet connection
Total # of online projects initiated this quarter	22	
• International	4	
• National	4	
• Cross-Regional	2	
• Intra-Regional	12	
Number of Armenian Teachers involved in online activities	108	
Number of Armenian students involved in online activities	223	
Number of Armenian community representatives involved in online activities	55	
* Taken from the Armenia School Connectivity Program website (www.ascp.am) on 2/15/06.		
Figures are available for the most recent quarter only.		
**Two different figures are reported on the ASCP website (324 and 326)		

b. School ICC Operation and Management

Currently, the mandatory hours of school ICC operation are from 10:00 a.m. to 5:00 p.m. (3 hours are dedicated to educational purposes and 2 hours are set aside for community usage). Each ICC operates according to a schedule designed and approved by the school administration. It is worth noting that community access is somewhat limited, since community members or other individuals may be working during operating hours.

2. Staff Development

“Harmony” Foundation is responsible for the technical training of the school ICC *site staff*. The ICC site coordinator is the one who then trains both teachers and students at the SCP schools in

basic computer skills. Three types of technical training are provided for the site coordinators: Web Design, Network Administration and Basic Computer Training.

1) Web Design – This training consists of 12 classes and is held in Yerevan. The objective is to enable the creation of school websites and the development of Armenian language web resources. *The Program reports that 195 schools in Armenia have started to create and currently continue to develop school web sites* (www.hf.am on 2/15/06). *In addition, there are 28 content-based websites in Armenian in ASCP schools*, ranging from Biology, to Geography, to Drawing (www.ascp.am/en/resources.html).

2) Network Administration – This training consists of 15 classes which provide basic knowledge on network setup, troubleshooting, and security.

3) Basic Computer Training – This training consists of 10 classes and is conducted by regional trainers. This training provides knowledge on basic MS Windows and MS Office operations (Word, Excel, and PowerPoint), Internet Explorer, antiviral and archiving programs, as well as e-mail. Project Harmony has developed an online Computer Literacy Testing System in Russian and Armenia (<http://exams.ascp.am>), which measures a person's level of computer skills and knowledge through multiple choice tests. The scores of the tests are sent to the regional trainers to assist them in their computer literacy trainings of the ICC staff.

a. Online Resources

While the site coordinators provide technical training to the teachers, an online teacher's guide ("Teacher's Guide on Integration of Information and Communication Technologies in Secondary Schools")¹⁶ has been developed by ASCP in collaboration with colleagues at Kent State University. It assists teachers in the integration of technology in the classroom. This guide is an introduction on how to apply information and communication technologies to secondary school teaching.

There is also an online Training of Trainers Guide, a series of presentations designed to help trainers and facilitators introduce online learning concepts and materials. Topics include: Basics of Online Interaction; Communication and Facilitation Skills for Online Leaders; Technical Issues; The Importance of Adult Learning Characteristics; and Content and Subject Matter Experts (how to integrate materials into the process).

Finally, there is a web page dedicated to helping middle school students get acquainted with computer software and hardware, as well as the principles and details of their functioning.

b. Example of a Training of Trainers Session

For three weeks in April and May 2004, Project Harmony contracted with Full Circle Association to conduct a series of online facilitation trainings, consisting of online interaction and offline workshops. Attendees included eleven Regional Community Developers, seven

¹⁶ See <http://www.ascp.am/en/exchanges.html> for reference to the Technology Curriculum Development Project and http://projects.ascp.am/t_guide/ for a copy of the teachers guide.

Regional Education Coordinators, and four Project Harmony Yerevan staff. The purpose of the training was to prepare trainers to deliver a regional workshop at an ICC in Ijevan for 20 participants from NGOs in the Tavush and Lori regions, as well as teachers and ICC staff at the school.

3. Online Activities: Courses, Chats and Competitions

The online activities, in general, are organized and implemented either by Project Harmony staff (including regional coordinators) or occur as part of a school partnership between an Armenian and American school. In the latter case, the activity is organized and facilitated via collaboration between teachers from the two schools.

a. Online Courses

Project Harmony worked with a subcontractor (Connected Minds) to develop four four-week online courses to encourage interaction between Armenian and American schools. These courses are referred to as the *Connected Minds* programs and they include curriculum on civic education, conflict resolution, social justice and change for the future, issues of interdependence, and mutual images and perceptions.

The *Connected Minds* courses are available in English only. American, Armenian and Russian schools participate in the same curriculum, at the same time. Each course is supported by a listserv and a website. Between 400 and 500 students participate in each course (25% American, 50% Armenian and 25% Russian). Students are divided into smaller discussion groups to facilitate interaction and each student is provided an account and password for the course. All of the *Connected Minds* curricula are located on a secure website and interactions between the students are closely monitored by three Project Harmony staff (two in Armenia and one in the United States).

Courses that bear a direct relationship to the long-term goals of ASCP include the following.

Mutual Understanding

- Connected Minds: Introductions and Interdependence – Fall 2005
Students learn how different parts of the world depend on each other for basic needs, such as food and clothing. Students communicate with other students, describing their daily lives. Students share further details about their country, as well. Students explore similarities and differences between cultures, and discuss discoveries surprising to them.
- Connected Minds: Images and Perceptions – November 2004
Students learn about stereotypes and tolerance. They explore the formation of stereotypes with activities based on images and perceptions. Students attain greater appreciation for respect and openness. The students learn to value cultural diversity and alternative points of view. The students discuss, within the Web Fora community, common stereotypes of their own culture and describe how their life is similar to or different than these stereotypes. Students also explore details of other students' lives.

Civic Education and Community Building

- Civics Education Curriculum – Spring 2006
The curriculum covers basic themes: Civic Life, Politics and Government, Foundations of the Political System, Principles of Democracy, Other Nations and World Affairs, and Roles of the Citizen. The curriculum can be used as a semester- or year-long course or its components may be used as stand-alone lessons. The curriculum employs the Internet as a tool for teachers and students to promote a cross-cultural dialogue that fosters tolerance, respect and a better understanding of the governments in their respective countries, as well as to build strong communities. The curriculum provides instructional activities, strategies, and in-class and online projects that can be used to engage students in the learning process.
- Connected Minds: Social Justice and Change for the Future – Spring 2006
Students utilize the Web Forum community to discuss their feelings about social justice, change, and views of the future. Students share details about what they anticipate for their own futures, as well. After receiving responses from other schools, students explore ways to promote social justice in the coming years.
- Connected Minds: Conflict and Conflict Resolution – February 2006
This lesson plan helps students understand the causes of conflict and presents a useful methodology for resolving conflict. Students evaluate conflict in their own lives and the lives of their matched schoolmates. The exercises help students realize that the causes of conflict around the world are quite similar, and think about how conflicts can be resolved in the present and future.
- Student Assembly – Spring 2003; Spring 2004
The aim of this project was to form a nationwide Student Parliament in Armenia, through local school elections. The project involves all 11 regions in Armenia and was implemented by ASCP. The main goal was to expose high school students to the nuances and peculiarities of the Armenian legislative body through actual political participation. It was also intended to broaden their views on the workings of democracy, through their own political engagement. The project consisted of three phases: 1) local school elections; 2) *online parliamentary sessions*; and 3) a plenary conference – giving voice to urgent issues in the Parliament of Armenia. Using a dedicated online space, the parliamentary sessions were devoted to debates within each of the Student Assembly committees, assigned to a specific topic. The student parliamentarians also discussed various school-related issues during the breakout sessions of the Student Assembly. The discussions for the plenary sessions are guided by a document developed by Project Harmony-Armenia and generally cover parliamentary and procedural mechanisms, debate and elections. *Students also discussed documents currently under consideration in the Armenian National Assembly.*

b. Chats

There have been several, live, one-hour chats on the ASCP website which are directly related to the goals of the SCP Program. They addressed the mutual understanding, civic education, and

English Language Training support. Examples of online Chats and their connection to Program goals are listed below.

Mutual Understanding

- International Education Week Chat with Ambassador Ordway and Students and Teachers of SCP-Armenia (November 18, 2003)
The chat focused on exchange programs and experience with exchanges in the United States, as well as the U.S. educational system.
- Black History Month Chat with Dr. Steve Michael and Dr. George Garrison from Kent State University (February 28, 2005)
Students from five Yerevan and six U.S. schools participated. Prior to the discussion, students were asked to view the film “Malcolm X.” The chat centered on Black History and its celebration in the United States, as well as the civil rights movement and affirmative action today.

Civic Education and Community Building

- Democracy in the views of Armenian Students (March 26, 2004)
Students and four Armenian experts chatted about ideas of democracy, citizen participation, good governance, and whether there is democracy in Armenia. The experts were from the Forum for the 21st Century Leaders, the South Caucasus Youth Political Network, and the Yerevan Center for Democracy and Peace (a local NGO).

Support for English Language Teaching

- Online chat with Patricia Sullivan, the Regional English Language Officer (June 22, 2004)
Eight English language teachers from various regions in Armenia chatted about English language teaching issues, including assessment challenges, student-centered activities, and development of the teachers’ language proficiency.

c. Competitions

Project Harmony hosts a number of web-based competitions which are advertised on the ASCP website. Generally, the competitions serve to mobilize involvement in the Program and stimulate the use or development of online resources in the ASCP school network. Competitions have involved the creation of a school website, small school websites for particular subjects, or English lesson plans, for example. Competitions are followed by an awards ceremony and, in some cases, all contest entries, not just the winners, are displayed on the ASCP website.

4. Physical Exchanges and School Partnerships

Teacher selection for the exchange visits in the ASCP is not linked to active, online participation by the teachers. Instead, it serves as a mechanism for developing teacher interest, skill, and commitment to the online collaborative projects themselves. In many cases, the subsequent online collaboration is a result of participation in these physical exchanges between teachers. It is

important to note that, in general, the ASCP has sponsored relatively few exchanges. It was not until 2003 that the project in Armenia began to include partnerships with American schools.¹⁷

Project Harmony believes that the teacher exchange is essential for American “buy-in” to the project. ASCP reports that *as of December 2006*, 129 partnerships have been established between Armenian and American schools. The physical exchanges generally consist of groups of teachers (and students) from one country visiting the other. In general, the purpose is to introduce participants to the host country and provide a learning environment whereby teachers can develop online collaborative projects with partner teachers from the host country.

In October of 2003, 10 Armenian civics teachers from various regions in Armenia traveled to the United States for a two-week exchange. In the United States, teachers participated in a seven-day workshop conducted by iEARN to introduce ways of participating in online projects and to locate and incorporate existing resources. The follow-up to the exchange was an online course in Armenia to assist in the development of online projects based on the Armenian civics-focused curriculum.

In 2004, 30 educators were involved in exchanges between the United States and Armenia.

In March 2005, 23 Armenian educators visited the United States for two weeks. They participated in structured workshops, sightseeing tours of several U.S. cities, a home-stay with a U.S. teacher, a one-week visit to a host U.S. school, and classroom teaching activities. They also gave presentations at U.S. schools. The Armenian teachers returned to their country with textbooks and teaching materials.

Likewise, in July 2005, 15 U.S. teachers visited Armenia for two weeks. They visited school ICCs throughout the 11 regions of Armenia. They participated in a two-day workshop with 15 Armenian teachers before embarking on a home-stay with their Armenian counterpart. All of the teachers (Armenian and American) then reconvened for two days to present their project goals and implementation strategies for the upcoming school year. Participants were required to commit to follow-on work after the exchange, including the development and implementation of online project work (either a one-year project or three short projects).

Examples of online collaborative projects between Armenian and U.S. schools are:

- Yerevan School #198 and New Vista High School in Boulder, Colorado collaborated in an online photo diary forum that compared and contrasted the daily lives of students in both countries.
- “My Career Goals” – Pen Pal Partnership Project. For two years (since 2003) students from UC Berkeley Armenian Students’ Association and Armenian students have corresponded about career goals. The communication is in English and the project has 30 students: 17 from Armenia and 13 from the United States.

¹⁷ Given the focus on civic education and community development in Armenia, most of the Armenian schools established collaborative projects with members of their own school or with individuals from other schools in Armenia.

- Yerevan Secondary School # 67 and the Maryland School for the Deaf in Frederick, MD are collaborating on an online project examining “independence and democracy” issues. Students introduce themselves with short biographies and discuss what democracy means to them. The U.S. students filmed a movie in Washington, D.C. and added captions to explain the various monuments and buildings and their place in U.S. history. The students in Armenia compiled a video of interviews with people, including their own grandparents, about life in the former Soviet Union and Armenia’s independence.¹⁸

5. Armenian-Language Internet Resources

In addition to Armenian websites for the various ASCP schools, there are a number of materials available in the Armenian language on the ASCP website. Many of these resources focus on Armenian culture and history but two specifically address civics education. There is an online library in Armenian, which contains over 20 civics-based resources to enhance the civics curriculum. In addition, there is another Armenian-language website that contains lesson plans created to supplement the state curriculum for 8th, 9th, and 10th grade civics classes. One teacher clearly identifies the importance of creating Armenian language resources by linking it to Program longevity.

There are many subjects which are difficult to find on the Internet in [the] Armenian language. In the framework of SCP, we can create those web pages. I think that it will contribute to [program] sustainability.

- Teacher in Armenia

6. Community Outreach and Community Building

Project Harmony has used a similar strategy to promote community outreach by announcing competitions for the “best community project.” By in large, many of the community projects involve offline activities: craft displays, the production of a community newsletter, the planting of trees, clean-up of parks and helping the elderly and disabled with housework. There are, however, two examples of online fora geared towards community outreach.

a. Online Fora

A cross-regional online forum was held from March 9 to March 23, 2004. The project was facilitated by four ASCP Regional Community Developers¹⁹ from Yerevan, Armavir, Tavush and Vayots Dzor. The purpose of the forum was: 1) to organize discussions among computer users; 2) to identify the roles and impact of computers and the Internet on people’s daily life; and 3) to provide consultation on computer programs and working with computers. The language of the forum was Armenian. Each participant chose an ICC in the ASCP network and participated

¹⁸ Reported in Project Harmony’s newsletter dated January 2006.

¹⁹ This is a position that no longer exists after the restructuring of 2005.

free of charge²⁰; Project Harmony Armenia reports that there were 35 participants of various ages.

In September 2004, there was a four-month online forum for free legal consultations in the regions of Ararat and Vayots for community members. The purpose was to increase awareness of civic rights and was the initiative of three lawyers from the Armenian “Young Lawyers Association.”

D. SCP Activities and Program Outcomes

Focus groups, interviews, and conversations with students and teachers in Armenia reveal a number of direct links between SCP activities (as implemented by Project Harmony and Project Harmony-Armenia) and long-term Program goals.

1. Mutual Understanding

Teachers and Regional Trainers both expressed sentiments of mutual understanding and connection with the people they had met in virtual and physical exchanges. Cross-cultural learning was a key aspect of this, nationally, regionally, and internationally.

- *I returned from the United States with positive impressions. I visited schools in the U.S. and got acquainted with the education system. I think that we will continue our cooperation.*

-- Teacher in Armenia
- *Students get acquainted with customs and traditions of various countries. They form informal relations with student of other schools.*

-- Teacher in Armenia
- *Teachers of our school also participate in “Global Business,” a business ethics program. It means that we communicate not only with schools in Armenia, but also in Azerbaijan, Russia, Chechnya and Turkey. Every week I receive letters [e-mails] containing information about various locations.*

-- Teacher in Armenia
- *Our linkages are both formal and informal... we discuss both personal and project related issues.*

-- Teacher in Armenia
- *Computers are of course important, but the Internet is the most important thing for us, because due to it our teachers and students feel like they form part of the whole world.*

- Trainer in Armenia

²⁰ In some instances, select schools do charge community users a “fee” determined by Project Harmony to use the ICC (i.e., access the Internet or work on the computers). Generally speaking, most schools do not charge and found that, due to the speed of the connection at the school, community users tend to rely on Internet cafes.

2. To Catalyze and Assist Educational Reforms

The ASCP teachers recognize a clear difference in their teaching methods as a result of the online activities.

The most noticeable change is in the transfer of the locus of action from the teacher to the student. Teachers build small group work into their lessons. Many commented that they have begun to behave more as facilitators of the learning process, rather than as the sole source of information and learning.

- *I have worked as a teacher for seven years. The differentiation is different here... You are an intermediary between students and computers. It is both a way of communication and a way to download information.*

-- Teacher in Armenia

- *Training has helped us in using new methods, which didn't exist in the Soviet schools.*

-- Teacher in Armenia

As a result of changes in the way classes are organized or taught, students have become more self-directed. Teachers expressed the attitude that it is a good thing for children to become more independent in the learning process.

- *We viewed diagrams created by computer during the Geography classes, which showed the quantity of population, movement and distribution... The children have created these by themselves and analyzed what they had seen.*

-- Teacher in Armenia

- *...I will add that it will be better to have... children more skillful in computers so they can find and prepare materials by themselves.*

-- Teacher in Armenia

Finally, many teachers emphasized the fact that these changes in teaching methodologies have made the classes more interesting.

It was not a secret that children prefer to sit at the computer than to study in classes with books.

-- Teacher in Armenia

The effect of this is that students pay attention in class and actually attend classes that previously they may have missed.

There are subject discs we use during class... it is during Biology. When children come after six classes... they are not able to sit and imagine what [the] teacher says concerning the division of cells. So they don't come [to classes]. After his friends tell [him] what they have watched on the Internet, there are no absent students [in the] next, seventh class.

-- Teacher in Armenia

We carried out a lesson about "The Population of the World," where we showed diagrams, maps, schemes, which were very little in the textbook and they didn't pay attention to them. But they were very interesting and visible by computer.

-- Teacher in Armenia

In essence, by integrating IT into classroom activities, the subject matter has become more interesting for students and teachers alike. When students use the Internet for research or as part of classroom activities, it broadens their horizons, both intellectually and with respect to their place in the world. Students are more willing to devote their time and energies to their schoolwork.

- *I think that it is more interesting to teach classes with the help of computer. The activities are nice and the classes are educational.*

--Teacher in Armenia

- *...We have had classes concerning sightseeing during classes of French. And students who have seen those sightseeing [activities] have had a desire to be in Europe. So our classes have become more interesting and they have a desire to know more about [the subject].*

-- Teacher in Armenia

- *I also think that SCP is important for the students, as they spend more time at school... Students prepare term papers and download materials from the Internet. Thus, they are eager to spend the time at school...*

-- Teacher in Armenia

Indeed, teachers frequently commented on how the activities of the ASCP Program have opened doors to them and their students in terms of access to information. This is particularly important, since easy access to information was not always possible in Armenia.

- *...When we take any subject, we see that we know less about it and we can study it more, because the doors were closed for finding new materials in the period of the Soviet Union, but the picture is quite different now.*

-- Teacher in Armenia

- *There are also themes about other specializations we are interested in: Biology, Geography. And I can open and find what interests me. I develop myself either in my specialization or in another specialization.*

-- English Teacher in Armenia

- *When you give students any task, they can read several books and not find any information, but [the] Internet gives them that chance... [to] search sites where they can find the information they like.*

-- Teacher in Armenia

Finally, as noted by Project Harmony trainers, simply introducing teachers to computers does not necessarily change their approach to teaching; this is why the partnerships with iEARN and

Connected Minds have been so critical. The workshops and civics curricula help teachers focus on how to integrate technology into the teaching process itself. On one hand, quite significantly, many teachers use the Internet as a critical source of information and reference. On the other hand, some teachers still need more instruction on how to use the new information available in more novel ways. Comments made by some teachers in the focus groups show that they still apply a top-down approach or substitute the computer for a textbook or a projector, when one is not available.

- *We had to conduct a lesson devoted to [a] famous Armenia painter Aivazovsky. The teacher searched relevant information on the Internet for two days, and found his painting with [an] explanation. Though the information was in the Russian language, she translated it into Armenian with the help of a computer program. Then, she decided how to conduct a lesson. She collected 30 students in her room, and she planned to show the material with a projector. But unfortunately, a projector was not available, and she showed the material using computers.*

-- Teacher in Armenia

- *The English language teacher conducted a lesson devoted to Shakespeare. She found the corresponding web page on the Internet, which included his biography, pictures of his house, etc., and at the end there was a test. The material was presented in the classroom, students discussed it and students answered the questions included in the test. Afterwards, they were given assignments and they e-mailed their work to the teacher.*

-- Teacher in Armenia

3. Building Skills: Computer Skills, Foreign Language Acquisition and Self-Esteem

The ASCP trainers and teachers report a marked improvement in a number of skill areas as a result of their participation in the SCP/Project Harmony Program. Comments from teachers and Master Trainers reveal the impact of Program activities on skill acquisition, which is a key Program goal.

a. Computer Skills

Because the needs were so great, the SCP Program in Armenia dedicated a considerable amount of effort to training teachers on computer applications and basic computer skills. This is reflected in the comments of Project Harmony trainers who described the training offered to teachers.

- *...During that seminar, we showed them [teachers] some Internet resources...about sending and receiving e-mail... Training lasted four school hours. It was enough for them to get acquainted to the computer and use it, as well as to have their own e-mail address.*

-- Master Trainer in Armenia

- *We try to teach them those programs, which are possible to use during the teaching process... We generally teach MS Office programs and PowerPoint.*

-- Master Trainer in Armenia

Computer training has been instrumental in providing the foundation for further work in the area of online collaboration and virtual exchanges.

- *Due to this project we have got literature on computers. Now, 90 percent of [the] teachers know how to use computers and we use new technologies during classes.*

-- Teacher in Armenia

- *We have never used computers before and we didn't need to. And now we have the chance to do it [use computers] at school, there is such a need...that we are planning to acquire [computers] for home.*

-- Teacher of History and Law in Armenia

In addition to sustained and focused effort on training in the basics of computer use, Project Harmony has leveraged its partnerships with iEARN and Connected Minds to train teachers in methodologies to integrate computer technology into the classroom and to provide online civics curriculum which enables teachers to integrate IT and collaborative learning principles into their projects.

b. Foreign Language Acquisition

Teachers have noticed that ASCP activities have had a positive impact on student language acquisition and interest in studying foreign languages:

- *There is another important consequence: many students began to study foreign languages better, so that they can communicate with foreign students themselves without the teachers' help.*

-- Teacher in Armenia

- *I want to add something about [an] online project I had. It was called "A Letter to Santa Claus"... they [students] were writing letters to Santa Claus and getting answers at the same moment. It was an essay. That helps them to improve their knowledge of English... They were from the fourth grade.*

-- Teacher in Armenia

c. Improved Self-esteem

One teacher clearly expressed how involvement in the ASCP Program positively affects the self-esteem of students.

In my opinion, students become more self-confident due to the Program. They can express their opinions.

- Teacher in Armenia

4. Mechanism for Extending Civic Education and Supporting Community Building

Several of the online projects exposed students to the political process in Armenia and gave them direct contact and access to individuals they might not normally meet. In particular, teachers spoke very candidly about the impact of interacting with Armenian politicians in these online fora/projects.

- *I carried out the second stage of the Student Assembly [project]. It was a successful project, especially when it had a continuation of its online project... We have met Arthur Baghdasaryan in the Assembly and [a] Member of Parliament, Sadoyan. Our project has a history of two or three years.*

-- Teacher in Armenia

- *Now we have the "Social Justice for a Bright Future" project and our teachers actively participate in it with our students. We have also had a Students Assembly together with an online program. The greatest result was students meeting with politicians. They have had debates and they have asked many questions. It was a big thing that they could talk to politicians.*

-- Teacher in Armenia

- *We had lessons concerning women and children[s] rights. It was interesting for children because they were watching the judges there by computer.*

-- English Teacher in Armenia

In addition, one teacher explained how involvement in the online project has changed student understanding and attitudes toward issues of civic concern, such as corruption. Moreover, this teacher provides a glimpse into how changes in attitudes among the students affect changes in attitudes at home and with family.

...The legal-social program is a new project. The subjects of [the] last case were corruption and bad habits. Once, during a lesson one of my students told me that his father would solve a problem concerning his garage with the help of a definite sum [extralegal payment]. But after watching the film he [the student] told [us] that he would talk to his father seriously. Next day... he said that his father would not pay that sum... We have understood that corruption begins with us; we fight against us.

-- Teacher in Armenia

Many of the school ICCs are used for activities that relate directly to the welfare of the community, as well as its concerns. Many activities are focused on training community members how to use computers.

- *...We have conducted training for wives and children of victims of war. We have an agreement [with the] Women's Association and we provide training to unemployed women.*

-- Trainer in Armenia

- *I want to mention that not only students but also their parents have participated in these programs... This program strengthens the relations between parents and schools... Now we operate a community-based program which involves nearly 400 parents who have participated in [a] 3-month free computer training.*

-- Teacher in Armenia

In addition, some schools do provide other types of services to their communities, and some provide computer training to schools *not* involved in the ASCP. The illustrative activities listed below involve teachers and ICC coordinators.

- *Our school has a newspaper for free, which we can consider as a help to the community. The newspaper is prepared by the teachers of Armenian language and the center administrator.*

-- Teacher in Armenia

- *Our school conducted training for teachers working in schools without computers.*

-- Teacher in Armenia

5. Partnerships with U.S. Schools and Impacts on U.S. Teachers and Students

a. Nature of the Partnerships

On average, 20 to 30 U.S. schools per year participated in the ASCP Program. The evaluation team visited two U.S. schools that had participated in ASCP: Foundation Academy in Jacksonville, Florida, and Annandale High School in Annandale, Virginia, to interview the teachers and students, and to learn more about their experiences with the Program.

The ASCP partnerships were organized directly between one school in the United States and one in Armenia. Foundation Academy had a direct partnership with School No. 5 in Gyumri. Annandale High School was paired with Metsamor School No. 1 in Armavir. As such, the teachers and students have an opportunity to get to know one another throughout the year. For the activities, however, Annandale High School was organized into a cluster of eight schools, of which half were Armenian and half were American. The teacher at Annandale felt this arrangement was ideal because it offered the teachers more flexibility. If anyone had a conflict in a given week, the other teachers would facilitate the sessions and keep the project on track. The teacher at Annandale High School, a large public high school, is an ESL teacher, which allowed her the flexibility to bring the activities into the curriculum as well.

As a private school, Foundation Academy was able to incorporate the activities into the regular curriculum, which the teacher felt added an international dimension to the school's offerings. The school administration was very supportive of SCP, which the teacher felt was key to integrating the activities into the curriculum.

b. Activities

There are several activities that took place under ASCP. It is notable that this Program specifically included teacher exchanges – the U.S. teachers traveled to Armenia in the summer and their Armenian partners visited during the school year. The trip lasted 12 days and the U.S. teachers visited the Ministry of Education and various cultural sites. They also gave presentations on their schools in the United States. During the time there, the Armenian partner teachers hosted them for three nights. The U.S. teachers were able to use their experiences to provide better information and guidance to their students in later activities.

The teachers participated in training sessions to learn about the Program and how it would operate. The teachers had an opportunity to learn about web fora, technology, computer-mediated communication, and how to be a successful facilitator. Former participants were present to share their experiences, which the teachers said was helpful in sharing their expectations.

Annandale High School participated in two of the *Connected Minds* courses: “Interdependence and Trade” and “Monuments and Historical Sites.” For each of these, students were divided into smaller discussion groups to facilitate interaction; each student was provided an account and password for the course. All of the *Connected Minds* curricula are located on a secure website and interactions between the students are closely monitored by three Project Harmony staff (two in Armenia and one in the United States). Due to the school’s proximity to Washington, D.C., the “Monuments and Historical Sites” course was easier to integrate with a field trip to visit the National Mall and volunteer at a soup kitchen.

Both Annandale High School and Foundation Academy students participated in the online fora provided by ASCP. The students who were interviewed in the site visits at both schools said they had enjoyed learning about Armenia, which they did not know existed prior to participating in the Program. The Annandale High School students and teacher have maintained contact with the other U.S. teachers and students in their cluster.

In addition to the activities organized by ASCP, the teacher at Foundation Academy recruited both SCP students and non-SCP students from the school to sew a quilt, which was then sent to their partner school in Gyumri. The teacher was successful in teaching the entire student body about the Program through that activity.

c. Impact on U.S. Teachers

The American teachers who have been involved in ASCP were enthusiastic about the Program and its results. The ten U.S. teachers who completed the survey said they valued international programs and felt that SCP gave them a good opportunity to expose their students to other people and places.

I think it is a fantastic opportunity for my students to work with students from another country--they have learned about another country, its history, its culture, its people, its problems. All the students have been able to communicate through the PH [Project Harmony] website and discuss things from music and siblings to the war in Iraq and child labor. Our school has a responsibility to prepare our students to participate in a global society, and PH helps us reach that goal. Why wouldn't I be involved in such a terrific and well organized Program?!

-- U.S. Teacher in ASCP

On a personal level, the teachers emphasized the importance of the physical exchange portion of the Program. One noted that the experience completely changed the lessons and motivated both the teacher and the students. The teacher is better able to bring the activities to life for the students with the knowledge, photographs, and souvenirs they bring back. Some also noted that the home stay experience forged strong bonds between the partner teachers, which meant they

did not have to create that initial connection before they could begin working together with their students. One teacher made the following poignant observation.

First hand experience of a culture - talking and meeting with local people about the history of their country - the ability to capture their culture through digital photography and videography - the ability to infuse cultural experiences into various curricular areas of study - the ability to bring first-hand experiences and knowledge of a culture coupled with visual imageries of a culture, helps students to better understand to form a relationship with other cultures.

– U.S. Teacher in ASCP

d. Impact on U.S. Students

From the site visits, we learned that the students were very interested to learn about another culture. As one U.S. student said, “From attending the online projects I learned that people from outside countries have more in common than I had ever believed. I loved being able to connect with people completely different than the people here and being able to learn about where they live and their surroundings.”

One U.S. school involved with ASCP incorporated a study of the Armenian genocide and the Rwandan genocide. The students involved in that Program were very articulate about the things they learned about both countries.

- *Both countries that I was involved in a SCP project with experienced terrible genocides that were for the most part ignored by the rest of the world.....SHOCKING!!!!!!*

– U.S. Student in ASCP

- *One surprising thing I learned about was the amount of similarities between the students from Armenia and Rwanda. They went through a lot of the same tragedies.*

– U.S. Student in ASCP

- *I learned about local problems within their communities, things I would have never learned without being involved with SCP.*

– U.S. Student in ASCP

These students also reported new views of the United States as a result of ASCP. For one, it was learning that the United States provides assistance to countries in times of need. For another, it was how well the United States was regarded by people in other countries.

E. Summary Observations

As the oldest SCP Program, ASCP has moved through several stages. The initial stages of the Program were geared toward the establishment of computer centers in schools and the creation of an extensive network of schools. This was necessary because an IT infrastructure was not previously available in Armenia. In a country with few Internet centers and an underdeveloped

infrastructure, the challenges and importance of this task should not be minimized. After establishing the centers and continually expanding the network of schools, the Program was able to begin training teachers in computer applications, Internet use in the classroom, and other collaborative learning methodologies. The ASCP website, online curriculum, and online projects have been an important part of this process.

In spite of these challenges, a number of important Program goals have been achieved. Teachers and students alike have gained important skills: computer literacy, improved self-esteem and an interest in studying foreign languages. The mere fact that the centers have been established has provided freer access to information for teachers and students in a country which previously did not have a tradition of open communication and information sharing.

Most Armenian teachers are at the initial stages of learning the basics of technology and computers. In spite of this, many teachers are discovering that they have changed their teaching methods as a result of learning new computer technologies and online skills. In effect, there has been a subtle shift away from the teacher as the sole locus of action. Students are becoming more self-directed in their activities at school. Finally, the online activities geared toward civic education have exposed students to the Armenian political process and have created dialogue among the students regarding civic duty and democracy.

One of the strengths of the ASCP Program, as implemented by Project Harmony in Armenia, has been its partnership with other organizations to leverage its resources and draw upon other skill sets. In particular, it has worked with iEARN to provide training to teachers on integrating technology into classroom activities; the *Connected Mind* series was produced by an organization contracted by Project Harmony and ASCP has partnered with the UNDP to establish four regional technology centers. These types of partnerships can provide essential support as U.S. funding diminishes.

4

BUILDING RESPECT THROUGH INTERNET DIALOGUE AND GLOBAL EDUCATION (BRIDGE)

THE SCHOOL CONNECTIVITY AND ENGLISH LANGUAGE TRAINING PROGRAM

Chapter Four

A. Introduction

BRIDGE is the School Connectivity Program for the Middle East, North Africa, and South Asia. The Program is administered by the International Education and Resource Network (iEARN) and is active in 10 countries: Algeria, Egypt, Jordan, Lebanon, Morocco, Pakistan, Saudi Arabia, Sri Lanka, Syria, and Tunisia.

This chapter provides a brief summary of key findings and an overview of the BRIDGE Program, examining content, training for teachers and Master Trainers, and Program activities. It includes an assessment of the Program's effectiveness in reaching specific State Department and Program outcomes. The chapter is based on **qualitative data**, including reviews of Program documents and websites, interviews with key informants, and findings from a site visit to Lebanon, the country which played a leading role in implementing the BRIDGE Program in these regions. The Evaluation Team conducted the site visit in Lebanon from May 6 to May 10, 2005.

B. Key Findings

1) *Mutual Understanding*

- Both Lebanese teachers and students developed an enhanced understanding of the United States and experienced cross-cultural learning as a result of their participation in the virtual exchanges.
- Online fora, such as “One Day in the Life of Cross-cultural Comparison,” and “Understanding our Similarities through Religious Beliefs,” were particularly useful in creating a more nuanced understanding and provoking critical thought among participants.
- Lebanese students, in particular, now recognize that others are more like them, with similar cares and concerns, views and opinions. They discovered that there are not as many differences between peoples as they first imagined.
- As they have integrated BRIDGE Program projects and new information technologies into course activities, teachers have recognized a shift in the orientation of the BRIDGE students. The students now understand that they live, learn, and function in a public space that is less confined, whether its dimensions are societal or even global.
- Students and teachers have developed personal friendships with both students and teachers in other BRIDGE countries and in the United States during the course of the Program activities.

2) Educational Reform

- BRIDGE teachers reported noticeable changes in their approaches to teaching as a result of participating in online activities. Incorporating the online projects into the classroom has enabled teachers to introduce new techniques and new technologies.
- Both students and teachers alike have become more motivated as they have worked on the project-based Program activities. Teachers themselves have become more proactive in the classroom and report feeling empowered as a result of their participation in BRIDGE activities.
- The BRIDGE Program's reliance on teacher training and mentorship imparts critical skills to teachers and gives them ownership of the project. This has built a solid foundation for Program sustainability and capacity development in each school.

3) Skills Development

- The BRIDGE Program has been a catalyst for the development and improvement of computer skills, such as designing websites and using the Internet as a source of information, for both teachers and students.
- Computer skills have been a "*sine qua non*" for effective participation in BRIDGE online fora and for increased use of project-based learning methods that integrate new information technologies and web-based information.
- Teachers have learned the principles of collaborative online projects as well as how to design them and implement them in the classroom.
- Many teachers reported that students became more mature and self-confident as a result of their participation in the BRIDGE Program.
- Students report how their involvement in the BRIDGE Program has helped them to develop critical life skills, such as teamwork and team building.

4) English Language Instruction

- Participation in the BRIDGE Program has improved the English language skills of students and teachers alike. Roughly seventy percent of all BRIDGE online projects are conducted in English.
- BRIDGE English teachers in Lebanon have taken advantage of the online fora and online resources to update and expand their curricula. They have also used the online fora for class exercises in writing and reading in English.
- In particular, the online fora and collaborative online projects have resulted in noticeable improvements in the BRIDGE students' English language skills, especially writing and self-expression. Teachers also noticed marked changes in students' confidence in their abilities.

5) Community Service

- Citizen and youth empowerment, as well as social responsibility, are fundamental to the BRIDGE Program. Program activities and projects provide opportunities to engage in collective action, problem solving, and activism.

- Participation in YouthCaN²¹ environmental projects and fora, in particular, has allowed Lebanese teachers and students to combine project-based learning with outreach activities for the community.
- Students in Lebanon have involved their parents, their communities, and the media in their initiatives to change behavior, and to generate interest in their community projects.

6) Strength of Implementation

- The BRIDGE strategy of using teachers as trainers imparts critical skills to teachers, which includes the delivery of online courses, facilitating and monitoring the content of the online fora, and mentoring their colleagues. This strategy also gives teachers a sense of project ownership and builds a solid foundation for Program sustainability.
- This grassroots approach, in effect, makes teachers change agents in terms of introducing new teaching methods. This democratic approach has a trickle-down effect, as teachers themselves encourage students to take initiative in developing their own projects.

C. BRIDGE Program Description

iEARN is responsible for implementing BRIDGE Programs in all ten countries in the Middle East, North Africa and South Asia. The Program is structured such that teachers receive the lion's share of formal training (via the online courses) so that they can introduce and integrate project-based work into the classroom, relying on iEARN's online fora. These online fora also provide students with a virtual "space" for online dialogue, collaboration, and learning.

iEARN administers the BRIDGE Program in a highly decentralized manner. There is no "Head Office" responsible for coordinating all of the country Programs. Instead, organizations in the iEARN network conceive and implement their own Programs with guidance from iEARN. They rely on its websites, online fora, and discussion groups, as well as educational and training materials and other instruments.

So, while iEARN country offices are dedicated to the same outcomes and goals, they must recruit their own members and secure their own funding (for example, U.S. State Department funding for BRIDGE is part of the iEARN office portfolio in Lebanon). In the case of BRIDGE, each country office, in conjunction with the Ministry of Education, holds its own merit-based competitions to select the participant schools and the teachers who will act as the Program's Master Trainers. Activities may vary across schools and countries, depending upon the reliability of Internet access, its speed, as well as the assent of the Ministry of Education.

The long-term goals/outcomes of the BRIDGE Program are:

1. To build understanding between U.S. citizens/communities and citizens/communities overseas participating in the Program, and among countries, regionally and internationally.
2. To catalyze and assist education reforms, including PBL and collaborative learning, and using technology in the classroom.

²¹ Youth Communications and Networking (YouthCaN) is an online forum administered by iEARN which involves participants from around the world. iEARN organizes regional YouthCaN conferences which provide a forum for students to present their online projects and virtual conferences where participants present their online projects.

3. To develop skills and knowledge for teachers, students, regional coordinators, trainers and other participants.
4. To build sustainability in terms of resources, activities and linkages.
5. To support English language teaching.

To achieve these goals, iEARN has structured the BRIDGE Program around five basic components: online collaboration; teachers training through online courses; Master Trainers; regional conferences and workshops; and physical exchanges.

1. Online Collaboration

According to the iEARN office in New York, roughly 70 percent of the BRIDGE online projects are conducted in English. Over 150 fora are offered through the iEARN website to its members, and to participating teachers and students worldwide. The topics represent a broad array of areas: creative/language arts, science/environment/math, and culture and society. Because fora are not specifically limited to the BRIDGE participants, but rather are open to the entire iEARN community of users, the range of topics, number of projects, and the number of potential interactions are increased significantly.

About half of student participation in fora occurs after school, when students log onto the iEARN website from home or an Internet cafe. Since students may participate in any of the iEARN fora, their participation is fluid and often outside of the normal school curriculum. Thus, it is difficult for the evaluation team to determine exactly the number of fora the BRIDGE students are actively involved in and the exact numbers of BRIDGE students participating.

While the online iEARN fora are not designed specifically for the BRIDGE Program, the content of many of the fora fall within the rubric of the BRIDGE Program goals. Furthermore, some of these fora originated in BRIDGE countries or countries in the region (i.e., the iEARN forum facilitator resides in a BRIDGE country). Two of the fora listed below are active in Lebanon and were cited by both students and teachers as examples of their BRIDGE activities (Friends Circle and YouthCaN). Lebanese students also presented a project on the Student Unlimited forum at the 2005 iEARN Annual Regional Conference in Beirut.

Below is a summary description of a few of the iEARN online fora and their relationship to the long-term goals of the BRIDGE Program.

Mutual Understanding

- *One Day in the Life of Cross-cultural Comparison:* Students submit descriptions of one typical day in their lives. Different countries are listed as fora topics and the entries are responses to the country/topic. *Students from Pakistan and a high school in Massachusetts have an active and ongoing exchange on this forum.* These students share photos of their daily routines and traditional clothing, as well as explanations of the photos' significance.
- *Friends Circle:* The Project involves 10 different activities that enable participants to gather a wide range of knowledge about people all over the world. *The Project is*

facilitated by a teacher in Egypt. This Project is very successful and popular in Lebanon (available for students ages 12-18 years).

- *Get to Know Others:* In this project, students study their own culture, traditions, and ways of life. Students compare their culture with other cultures to find similarities and differences. *This project is facilitated by a team of three teachers: one in Iran, one in Pakistan and one in Egypt.*
- *Understanding our Similarities through Religious Beliefs:* The project is designed to highlight specific similarities among religions. The aim of the project is to facilitate greater understanding among students of different faiths and cultures. *This project is facilitated by a teacher in Iran.*

Educational Reforms (Project-based learning, collaborative learning, and using technology in the classroom)

- *YouthCaN (Youth Communications and Networking):* Students facilitate an online network of students around the globe to promote environmentalism. Students share their ideas for projects to clean up local areas and/or undertake research on endangered local species, as well as conservation (e.g., how to economize on water). Students also write about environmental issues facing their communities during the year. Each spring conferences are held in New York City as well as in Beirut (YouthCaN Mediterranean), so that youth can share experiences with their peers and explain how they use technology in environmental projects. Students in BRIDGE countries take part in the conference via the Internet and video-conferencing with the students in New York City. iEARN estimates that in 2006, over 1,000 students will participate (physically and virtually). *This is one of the more popular fora among BRIDGE students and teachers in Lebanon.*
- *Global Leap: A Videoconferencing Project:* This forum serves as a resource for teachers worldwide, enabling them to receive assistance and advice on developing videoconferencing as part of the curriculum and finding partners for interactive videoconference lessons.
- *ICT Forum:* This forum focuses on web-design and web-programming, networking, e-learning, and application programming. The forum website offers online courses as well as downloads. Each group of students works on one part of a specific project. *This forum is facilitated by a teacher in Iran.*

Support of Civic Education and Community Building

- *Here at Home:* This forum is designed to help student explore, in depth, various dimensions of education, government, economy, and transportation in their own villages, towns, and cities. *This forum is facilitated by two teachers: one in the United States, and the other in Pakistan.*
- *Students Unlimited:* This project highlights the participation of students and youth in community service and helps them to take action and become involved in their communities. *This forum is facilitated by one teacher and two students in Egypt.*
- *Project under discussion/construction in Lebanon:* iEARN-Lebanon has invited students and teachers to brainstorm and develop a project that will examine the recent Lebanese

political rallies. The proposed purpose of the forum is to examine topics such as: What is the meaning of civic duty? How can understanding diversity add value to Lebanon and nations around the world? *Both teachers and students in Lebanon mentioned this new topic during the site visit in Lebanon, where there is considerable optimism about its potential.*

Support English Language Teaching

- Ways of Writing: This forum allows English language teachers to discuss strategies to involve students in iEARN projects and to integrate iEARN projects into the required school curriculum. *This forum is facilitated by a teacher in Syria.*

Both the iEARN Program staff and the BRIDGE teachers in Lebanon recognize that the key to sustained interaction among schools is the identification of teachers' curriculum-based interests. Teachers in Lebanon report that it is difficult to integrate the BRIDGE Program into the normal school coursework due to time constraints. Therefore, the forum content becomes critical. For example, a science teacher involved her students in the YouthCaN project on waste management/dumping and endangered species, whereas a math teacher in the same school used iEARN online materials to work with rubrics and problem-based learning in math.

Many of the teachers said they would become more involved in the Program if there were online fora in their subject areas (e.g., history, social studies). The BRIDGE country coordinator in Lebanon is well aware of this issue. According to her, the next step in teacher development is simply for the teachers to go forward and develop the content themselves. It is important to note that the very structure of iEARN is flexible. The only thing required for a forum in a particular content area is either teacher or student initiative. In fact, many of the in-country and online workshops by iEARN-Lebanon are structured as a "how to" guide for teachers, to assist them in developing their own online collaborative projects. The Master Trainers' role is to provide assistance and motivation in this endeavor.

2. Teacher Training: Online Courses

BRIDGE teachers have access to a variety of nine-week online courses offered on the iEARN website. iEARN country offices also offer online courses which can be shorter in duration; the Lebanese iEARN website offers a four-week course for teachers. In general, the online courses are designed to introduce teachers to iEARN (i.e., the website, the fora, etc.), and to help them design an online collaborative project that meets established curriculum standards and can be integrated into their classroom activities using technology.

The actual online course methodology for iEARN worldwide is based upon a research study conducted by the BRIDGE/iEARN country coordinator in Lebanon. iEARN offers eight online courses, twice a year, for teachers. Each course brings together educators (K-12) from the United States and their counterparts from across the globe in a virtual forum. The course is asynchronous, which means that the participants work according to their own schedules to complete the weekly assignments. However, the online courses are interactive in that communication occurs between the participants themselves, as well as between the participants and the course facilitators. Each course is comprised of twenty-five participants and two

facilitators. The composition of the participants is quite international since iEARN makes sure that at least ten countries are represented among the teachers in each of the nine-week courses. The standard course has eight modules with one lesson per week and requires approximately 4 to 5 hours a week to complete. Teachers must commit time outside of their usual classroom schedule and work. Teachers who complete all course requirements receive a certificate from iEARN-USA which recognizes them as an iEARN Master Teacher.

In order to participate in an online course the teachers must meet the following prerequisites:

1. Basic word processing, Internet, and e-mailing skills;
2. Reliable access to a computer and the Internet;
3. Availability to commit a minimum of five hours a week to the course; and
4. A classroom of students with whom they will work throughout the duration of the nine-week course.

Teachers must select and integrate a theme-based collaborative project into the classroom. The specific content areas of the courses and projects are: Creative Arts; Creative Writing/Language Arts; Science, Environment, Math; Social Studies; Teaching Foreign & Second Languages; Learning Circles (sharing information about culture or civics); Helping Students Cope with Trauma in Schools; and Moving Voices Digital Video Production.

Teachers from the BRIDGE countries have been quite active in these online courses. As seen in Table 4.1, teachers in six BRIDGE countries actively participate in the online courses, involving their students in collaborative online projects that integrate course content into virtual exchanges (fora, videoconferencing, digital productions, e-mail, etc.). It is noteworthy that, over the course of two to three years, the number of teachers signing up for online courses has been increasing, particularly in Lebanon, Morocco and Pakistan. With the exception of three teachers (one in Lebanon, one in Morocco and one in Egypt) who have taken two different courses, the numbers represent individual teachers. In addition, with the exception of one particularly active school in Pakistan, most of the teachers come from different schools within their countries.²²

TABLE 4.1 Online iEARN Courses Teachers from BRIDGE countries**			
Course Topic	2003	2004	2005*
Teaching English as Second Language	Egypt: 4 Morocco: 1 Pakistan: 2	Egypt: 3 Pakistan: 1 Lebanon: 1 Morocco: 3	Egypt: 1 Morocco: 1 Pakistan: 1
Creative Art	Egypt: 2 Pakistan: 1	Pakistan: 1	
Creative Writing	Egypt: 2 Lebanon: 1 Morocco: 1 Pakistan: 1	Egypt: 1 Pakistan: 7	Egypt: 1
Science	Egypt: 2 Lebanon: 1 Pakistan: 2	Morocco: 1 Pakistan: 6	Egypt: 2 Pakistan: 1
Social Studies	Lebanon: 1 Pakistan: 1	Egypt: 1 Lebanon: 1	Morocco: 1 Pakistan: 1

²² Teachers from the Shahwilayat Public School account for 10 of the 20 online participants in Pakistan.

		Pakistan: 2	
Learning Circles		Egypt: 3 Lebanon: 5 Morocco: 3 Pakistan: 4 Syria: 1 Tunisia: 4	Egypt: 2 Morocco: 1 Pakistan: 1 Syria: 1 Tunisia: 1
Course Topic	2003	2004	2005*
Helping Students Cope with Trauma in School		Pakistan: 1	
Moving Voices		Egypt: 2 Morocco: 1	
Country Totals	2003	2004	2005
Egypt	10	10	6 *
Lebanon	3	7	
Morocco	2	8	3 *
Pakistan	7	20	4 *
Syria		1	1 *
Tunisia		4	1 *
* Data is only available for the first half of 2005. ** Source of the information is the iEARN website (January 2006).			

3. Teacher Training: Online Workshops

Online *workshops* are also part of the BRIDGE experience. Online workshops are very similar to online courses, but involve less time commitment (they range from two days to four weeks).²³ These workshops introduce teachers to the iEARN website, assist them in the design of online projects for their classrooms, and facilitate interactive communication with other teachers via fora and e-mails. Many teachers need these workshops in order to receive essential training in computer use and Internet access/tools, in addition to the more content-based training on how to integrate online learning into the classroom.

These shorter workshops are often very effective in introducing new teachers to the BRIDGE/iEARN Program. A March 2005 newsletter reports that iEARN-Jordan held a workshop/training for 20 teachers. As a result, 25 new teachers were added to iEARN-Jordan. While Jordanian teachers have been absent from the longer online courses, they contribute to the growth of the BRIDGE Program in Jordan. In-country workshops appear to be the key to recruiting new teachers and enhancing the involvement of those already in the Program.

4. The Master Trainer Approach

BRIDGE has adopted a “train-the-trainer” approach. As mentioned above, since the beginning of the BRIDGE Program, the Ministry of Education in each participating country has selected approximately two Master Trainers. The selected trainers travel to New York to attend a week-long training session that focuses on online collaboration and pedagogies that utilize new technologies. Two U.S. teachers also attend the training session. Teachers from Egypt, Jordan, Lebanon, Morocco, Pakistan, and Tunisia attended the Master Teacher-training session in 2005.

²³ These workshops also have fewer prerequisites than the nine-week online courses. For example, a four-week workshop in Lebanon only required that teachers possess basic word processing skills, an active e-mail address and Internet access.

a. Conferences, Workshops and Newsgroups

Each BRIDGE country conducts a national workshop with 10 schools and 20 teachers. At regional workshops, students, teachers, and administrators come together to discuss ongoing and future projects. The 2003 regional workshop was held in Cairo, the 2004 regional workshop in Amman, and the 2005 iEARN Annual Regional Conference was held in Beirut in July and broadcast live, via Webcast, around the world to other iEARN members. Generally these workshops/conferences last from three to five days.

In order to participate in one of the regional or international conferences, the candidate must be involved in two or more Program activities (i.e., online fora and projects). *Therefore, only those most active in terms of online collaboration are selected to attend these regional and/or international conferences.*

A science teacher in Lebanon emphasized the importance of these conferences. He stated that attending the 2004 iEARN Regional Conference broadened the virtual relationships he had already formed prior to the conference. He believes that since the conference, virtual exchanges with teachers and more informal communications about technical assistance and guidance have increased. The iEARN physical exchanges complement the virtual exchanges, which are the hallmark of the BRIDGE Program. Clearly, selecting conference participants who have been significantly involved in the online exchanges enhances this process.

Finally, iEARN sponsors a teacher newsgroup, an online forum that enables teachers to “meet and talk,” make announcements, and provide updates on their work. It is here and at conferences and workshops, that teachers share initial project ideas as a means of connecting with other teachers who might help to develop or facilitate a project. As part of their introduction to iEARN, teachers are encouraged to post an initial message on this newsgroup, introduce themselves, and briefly describe any special interests they (or their students) may have.

5. Reciprocal Exchanges Visits

The BRIDGE Program offers *reciprocal* exchanges for teachers and students. According to the iEARN website, in the spring and fall of 2005, the BRIDGE Program sent six delegations from the United States to BRIDGE countries and one delegation each from Egypt, Lebanon, India, Jordan, Morocco, and Pakistan to the United States. As of February 2006, two delegations from the United States visited Jordan and Pakistan and one delegation from Bahrain came to the United States. The exchanges last a minimum of three weeks, but may continue longer if the schools agree to this.

The BRIDGE teachers and students arrive in the United States and spend one week in New York City, attending a workshop before departing to their partner schools’ locations throughout the country. During their week in New York, students and teachers visit local schools and participate in a community service project.

Similarly, the U.S. teachers’ and students’ visits to each BRIDGE country are structured around a series of activities. In October 2005, teachers and students from Wisconsin traveled to

Lebanon, where they gave presentations on American life in five schools. These presentations were followed by group discussions of the American students' perceptions of Lebanon and vice versa. (Some of the discussions/presentations were attended by the Cultural Attaché from the U.S. Embassy in Beirut). The iEARN website reports that an American student described the exchange in this way: "We have come as part of a cultural understanding We want to share what we have learned with our peers."²⁴ Via the iEARN-Lebanon online forum, the American students received messages from Lebanese students who had not taken part in this exchange.

As part of the reciprocal exchange visit program, teachers and students are encouraged to work together on a collaborative project. Both prior to and after the exchanges, participants meet online in the iEARN Exchange Forum, learn about one another, and plan activities and a joint project. *In most cases, the physical exchange component is seen as a way to enhance the virtual exchange, by creating ties based on friendship and face-to-face interactions. These can also promote and buttress sustainability.*

One of the teachers in Lebanon who participated in an exchange visit to the United States echoed the idea that the physical exchanges can help solidify virtual exchanges: "The teachers who were in New York are still collaborating online... having a sort of feedback you could say. Each week we are adding new things and we are commenting on others' works..."

D. The BRIDGE Program in Lebanon and Program Outcomes

Lebanon was selected for field work because the Program there is emblematic of the BRIDGE Program, and it has been a catalyst for and provided significant guidance to BRIDGE Programs in North Africa, the Middle East, and South Asia.

The BRIDGE Program in Lebanon, like all iEARN Programs, is structured around teachers who volunteer their participation. It relies heavily on mentoring. Teachers are prepared to train other teachers. They learn how to deliver online courses for their fellow teachers and how to mentor other teachers in the Program. Teachers act as facilitators and monitor the content of the iEARN fora (i.e., on the website). iEARN does conduct an English language assessment, given BRIDGE's objective of English language training and the extent of activities that require English.

The Program generally functions after school hours. Several of the *private school* principals indicated that they encouraged their teachers to engage in iEARN activities during the school day, as well. *Public school* teachers indicated that iEARN activities occur after school hours.

1. BRIDGE Activities and Program Outcomes

The long-term goals/outcomes of the BRIDGE Program in Lebanon are addressed separately in the sections below.

²⁴ iEARN website: www.iEARN.org

a. Mutual Understanding

Both teachers and the students in Lebanon demonstrated enhanced mutual understanding and experienced cross-cultural learning as a result of their participation in the virtual and physical exchanges. More personally, they related the strong friendships that had developed during the course of Program activities.

- *Through the video conference we had, especially with the United States, and working with YouthCaN students from New York, and attending conferences with them, we learned how they think and how they work, and the daily activities they have. We found that they are very similar to us; we have many things in common that we can use to develop both our countries.*

-- Student in Lebanon

- *I used to think that [other participants] were very different from us... After I met them and talked to them, I feel that they are like me and they have cares and concerns just like me... even if we are from other countries, we can be friends [in spite] of everything.*

-- Student in Lebanon

- *...There are many cultural differences between Lebanon and the United States, so I think... the goal of the exchange is first to learn about these differences.*

-- Student in Lebanon

- *When I connect with other teachers... talking about many things, I find that we have the same way of thinking and the same view or opinion about events around the world. I find the people outside of Lebanon are not different from me. And that I did not know before.*

-- Teacher in Lebanon

- *...Getting to know the people there was really wonderful because as Arabs we have misconceptions about Americans and being there with [Americans] and living with them, seeing what kind of life they have, how they interact, what they think of the Arab world... it was really interesting to know... it's a rich experience... I mean, I am a different person now and the students too.*

-- Teacher in Lebanon

b. Educational Reforms

The BRIDGE teachers reported noticeable changes in their approaches to teaching and pedagogy as a result of the BRIDGE online activities. Although not all the teachers are able to easily incorporate new techniques and new technologies into the normal classroom routine, some teachers have been able to do so. This is particularly evident in the comments of the following teachers.

- *I usually prepare my English curriculum and I try to include an iEARN project and play in my curriculum and my annual syllabus plan. For example, let's say I am teaching [students] how to prepare a research report, of course I choose one of the iEARN projects. Then we start researching, we start preparing our reading questions, we start getting information from the Net, from the Encarta, from many other places...*

-- English Teacher in Lebanon

- *...I use the project to teach writing to my students... it was all done in class through writing, so we use the project to teach writing via a lot of activities in class and then they did a play at the end... it was basically a lot of activities plus the online collaboration so we are applying online project-based learning for English...*

-- English Teacher in Lebanon

As they have integrated iEARN projects and instruments, and new technologies into course activities, teachers have recognized a shift in the orientation of the BRIDGE students. In essence, the teachers have noticed that the students now understand that they live, learn, and function in a public space that is less confined, whether its dimensions are societal or even global.

- *...The teacher is no more the audience, there is a larger audience for them... it is no longer the teacher who is reading the writing of the students, now it is read by many people all over the world.*

-- Teacher in Lebanon

- *We started working on the iEARN project, YouthCaN, and that made the students go out of the classroom... they have to look around them... they become more like members of the society they live in...*

-- Teacher in Lebanon

One of the striking effects of introducing PBL into the classroom has been its effect on the motivation and involvement of students and teachers alike.

...You can see the difference; the students enjoy learning through projects... I enjoy it as well; I mean I started to feel the importance of project more than before... we do things differently.

-- Teacher in Lebanon

As a corollary to this, teachers in the BRIDGE Program have experienced fundamental changes in how they themselves perceive the role of “teacher.” These changes are critical to continued innovation in teaching methods. PBL has led some teachers to become proactive and more dynamic in terms of the locus and focus of activities, responsibilities, and engagement.

It was very empowering actually... it takes you out of the little box where they put you as the traditional teacher....the teacher's place is only on her desk... we reached out to our community... I had meetings with different people every project... how am I going to translate this into practical project work, not only theory.

-- Teacher in Lebanon

c. English Language Instruction, Acquisition and Application

In particular, the online fora and collaborative online projects have resulted in noticeable improvements in the BRIDGE students' English language skills (especially writing). Several comments from teachers in the focus groups indicate marked changes in students' confidence in their abilities. They also emphasized objective measures of progress.

- *iEARN was effective in the way that students are starting to talk and speak English in the classroom...*
-- Teacher in Lebanon
- *Since writing [in English] is the most difficult thing for students, more than reading, listening, so now writing [in English] became easier for them...*
-- Teacher in Lebanon
- *...Writing e-mails and posting messages on the Internet... This is something that students have been doing for a long time; it is not just this year. One important thing is the language students use when they write e-mails or chat... it is Arabic translated into English so that's not really English. But when they are [on an iEARN forum] posting in English, it is the same English that everybody around the world would understand, so that is really a good thing... it is really helping them concerning their English language.*
-- Teacher in Lebanon
- *...As for their English speaking, it developed a great deal because they were speaking, they were discussing, they were writing in English and they wanted to do this... When they posted everything they did online they were writing, they were editing and they were posting, they loved that and then they waited for the response and they enjoyed reading it...*
-- Teacher in Lebanon

Although the teachers are screened for their English language abilities in order to participate in the Program and its English language fora, the teachers do recognize that the BRIDGE Program has helped them to improve their English language skills as well.

...Honestly, reading messages on the fora and the students' responses has helped me to understand English.
- Teacher in Lebanon

d. Building Skills: Computer Skills, Self-Esteem, and Teamwork

The BRIDGE students and teachers reported marked improvement in a number of skill areas as a result of their participation in the BRIDGE/iEARN Program. Comments by both teachers and students in the focus groups affirm the effectiveness of Program activities in heightening skill development.

Computer Skills

While the focus of the BRIDGE/iEARN Program in Lebanon has not been on the development of computer skills per se, the independent and interactive nature of the activities has resulted in

improved technical skills for many of the teachers and students. It has been a “*sine qua non*” for effective participation in BRIDGE online fora and the increased use of project-based learning methods that integrate new information technologies and web-based information.

Comments from two teachers below highlight how participation in BRIDGE activities was the catalyst for computer skill development for both teachers and students.

- *I started doing accounts; I started learning a lot of skills on the Internet and on the computer... I learned a lot of programs... If I was just teaching English literature in a traditional way, I would have never had the chance or the opportunity to work on it. It empowered me as well as it has empowered the students...*

-- Teacher in Lebanon

- *...We're just trying to integrate the computer [into classroom instruction], we are using the Internet when we search for information and we are learning a lot... My seventh graders are now aware of everything concerning the Internet. Some of [my students] started working on preparing websites; some of them are just using other programs...*

-- Teacher in Lebanon

Improved Self-Esteem of the Students and the Teachers

One of the most important and frequently mentioned consequences of involvement in the BRIDGE Program is its positive effect on self-esteem, both for the students and teachers. Numerous teachers reported a direct link between involvement in BRIDGE activities and increased confidence.

- *...I felt that [the students] became very mature...we felt the difference in their personalities... they are different, more mature, more confident and more connected to their environment and the people around them.*

-- Teacher in Lebanon

- *I just want to say that last year we did a project titled “Preserve the Ozone”... due to the awareness campaign and especially the UNDP members [the manager], I actually became friends with some of the UNDP members and thanks to iEARN... iEARN gave me this confidence to go and talk to others from UNDP, Ministry of the Environment and so on...*

-- Teacher in Lebanon

One ninth-grade student made a connection between his involvement in BRIDGE/iEARN activities, new perceptions of himself, and changes in work habits. Another tenth-grade student described how her experiences in the BRIDGE Program had affected her personal growth and potential.

- *...I felt that participating in iEARN obliged me to work harder in school... iEARN pushed me towards making my homework better and my projects in school better.*
- *I [am] learning many things from iEARN. I grew socially, culturally and politically – it made me more self-confident and I learned that I have a lot to give and a lot to learn.*

- Students in Lebanon

Teamwork

On more than one occasion, students articulated their recognition of how involvement in BRIDGE activities enabled them to develop critical life skills. In particular, they singled out the skills of teamwork and team-building. They also directly connected teamwork to the larger context of creating political unity in a diverse Lebanon.

Working in groups is very important... it makes us share ideas so we benefit from others. A team at school is a small picture of our whole society, so if we in school know how to benefit from each other and hear each other, that will [bring us] unity in our... society, which [is what] all Lebanese are now seeking.

-- Student in Lebanon

One teacher, in particular, describes how the students organized themselves, worked together, took the initiative to complete a project, and invited others to join them.

...We started working on YouthCaN... and we concentrated on an awareness campaign... they [students] chose the first project which is related to their city of Saida... and then they started researching, making the activities, they did a lot of activities like cleaning the shore, inviting other students to participate in that event [cleaning the shore]...

-- Teacher in Lebanon

e. Community Involvement and Social Responsibility

Social responsibility and citizen/youth empowerment are fundamental to the iEARN/BRIDGE Program. This emphasis on activism and collective action is clearly reflected in the comments of several BRIDGE teachers.

- *Every project we do in iEARN actually has to benefit the community; it has to make the quality of life better in our community and our surroundings.*
-- Teacher in Lebanon
- *One of iEARN's goals is to let students know that they, as youth, can really make a difference in the world. I think my students now are aware that they can make... a change.*
-- Teacher in Lebanon
- *The first project last year, Waste Management Project... the students had their impact... the main question was whether it is the government's responsibility only to solve that problem [the problem of garbage]... They [students] suggested several things to do at home in order to reduce that problem, they posted their suggestions, they had responses from students in the United States and from Pakistan... they found out they can do a lot if they apply their suggested methods at home to reduce the garbage.*
-- Teacher in Lebanon

The YouthCaN environmental projects and fora, in particular, have allowed the Lebanese teachers and students to combine project-based learning with outreach activities for the community. In addition to inviting a Member of Parliament, Mrs. Bahia Hariri, to attend a project seminar, the students in Lebanon have sought out and involved their parents, their communities, and the media, to change behaviors, to educate, and to generate interest in their work. The BRIDGE teachers have been instrumental in this process.

- *...The projects influenced [the students]. The ones who were working on the garbage project started acting in a responsible manner and they published a brochure and distributed it... The project also influenced the students' behavior at home with their parents. They started to advise their parents not to keep the tap water open.*
-- Teacher in Lebanon
- *One of the projects I worked on was ecotourism and our end product was a brochure and a leaflet on ecotourism in Lebanon... people learned a lot about the school because we were interviewed on several cable TV stations, two or three local newspapers and they wrote about the project.*
-- Teacher in Lebanon
- *Every project we do in iEARN actually has to benefit the community... sometimes we involve parents. I got a lot of guest speakers to the school for many projects... a parent actually came to the school and helped the students in the layout; she is graphic designer. She really loved the project and she loved the way we are teaching the students... she ended up becoming a teacher at our school.*
-- Teacher in Lebanon

In the summer of 2006, Lebanon experienced a period of violence in the country. iEARN has continued to work with students in Lebanon, focusing on projects that take advantage of common interests, such as YouthCaN Mediterranean, which is devoted to joint environmental protection and reconstruction efforts.

Last year we focused on the "United Beyond Our Diversity" Learning Circle, which we offered in Arabic, English, and French, and is published online. We also worked on the environmental YouthCaN project.

This year we are working again on YouthCaN, as well as on a new version of "United Beyond Our Diversity - A Panorama - Tiles of Unity" so that youth can express how similar and diverse we are in the challenges we face. There are also other projects ongoing, like writing about the war in the peace forum... learning to write news, etc...

-- Director of the BRIDGE Program in Lebanon

2. Partnerships with U.S. Schools and Impacts on U.S. Teachers and Students

a. Nature of the partnerships

Of the six site visits made to U.S. schools for the evaluation report, only one school participating in BRIDGE was visited. Since most host country BRIDGE schools are secondary schools, the evaluation team selected a high school, Cardozo High School in northwest Washington, D.C., for the site visit.

As is the case with many of the U.S. schools that are involved with SCP and BRIDGE, Cardozo's participation has largely been due to a dynamic social studies teacher who has taken the lead to initiate the relationship and who serves as a lead teacher at her school. She has been involved in a range of Program components, including online collaboration, physical exchanges, regional conferences, and online courses, and she has acted as an advocate for the Program with her colleagues and the school administration.

b. Activities

The lead teacher at Cardozo, who is a member of the National Council for Social Studies, learned about the BRIDGE Program in 2002 and felt that it would be interesting for her students. She contacted the iEARN New York office for more information. At the time, the BRIDGE Program was in its first year of implementation and was heavily recruiting U.S. teachers. She became an advocate for the Program and brought it back to her high school, and has been working on the BRIDGE project since that time.

Online Collaboration

The lead teacher herself was planning, at the time of the interview, to participate in her first online project the following summer. However, several of her fellow Cardozo teachers have become involved in a variety of online projects, including the "Teddy Bear" project. Most of these activities are held during the school day but, as reported, are seen by the teachers as "extra" activities and not really integrated into their classroom work.

Online Courses

BRIDGE teachers in the United States, as well as abroad, can take a variety of online courses through the iEARN website. For example, in the area of assessment, several topics were available. During the fall of 2003, the Cardozo lead teacher enrolled herself in an iEARN online professional development course. After completing the course, she held a workshop for seven fellow Cardozo teachers in an effort to recruit more participation. She has requested that a staff person from iEARN facilitate a training course for D.C. public school teachers on using the iEARN website, as well as its online project and forum links. She believes this would motivate more teachers to become active.

Physical Exchanges

The lead teacher at Cardozo and her students hosted several Jordanian students in November 2005; in February 2006, she traveled to Jordan with several of her students. For her, the physical exchange component of BRIDGE is very beneficial, because it helps to breakdown the cultural barriers.

Regional Conferences

Regional conferences serve as another means of physical exchange, supporting the online components of the projects. For instance, soon after contacting iEARN in 2002, the lead teacher at Cardozo was invited to travel to Alexandria, Egypt to attend the first BRIDGE Regional Workshop, where she facilitated a session on civil law for the BRIDGE country teachers (she teaches Street Law at Cardozo). This was a formative experience for her, cementing her participation and commitment. While U.S. teachers only attend the regional conferences in small numbers, this continues to serve as an important incentive to their broader participation.

c. Impact on U.S. Students and Teachers

The case of Cardozo physical exchange described above presents an interesting example of the growth of mutual understanding through physical exchanges. The Cardozo lead teacher had attempted to house each student with a Cardozo student. Some initial hesitation was felt on the part of Cardozo students and parents due the fact that the students were coming from Pakistan, a country often associated in the U.S. media with terrorism. However, the students quickly changed their attitudes after their visitors' arrival. They were told by the Pakistani students that Americans are not always portrayed in a favorable light in their home country, either. The Pakistani students were hosted by their Cardozo peers for one night of the three week exchange and stayed with the lead teacher for the remainder of their trip. These visits led to the creation of friendships and ongoing relationships. For example, many of the Cardozo students still remain in contact with the Pakistani students via email.

Cardozo teachers who are involved with BRIDGE teach a variety of subjects including ESL, English, Social Studies, Spanish and Journalism, and thus are taking this activity, and the changed perspectives it brings, back into the classrooms in a variety of academic subjects. Cardozo's administration is supportive in providing backing and encouragement to the lead teacher for all of her proposed activities. It has supported the lead teacher's endeavor to

establish an international academy and a Model UN club. The teacher herself was honored in 2005 as an International Teacher of the Year, an award given by the World Affairs Council to educators who make contributions to international study in American classrooms. She also estimates that over 100 Cardozo students have participated in some BRIDGE activity. The teacher reported that she was planning to designate one day of the week as the iEARN/BRIDGE day in her classes, so as to increase the level of activity and participation.

The online survey provided further views by U.S. teachers on the impact of their BRIDGE participation in the online elements and in the physical exchanges.

- *I've made a number of life-long friends in the Middle East I could not have possibly met any other way. It is especially important for Americans to see that Arab cultures are incredibly welcoming and gracious is essential in this day and age. Best of all would be to have some U.S. students also visit BRIDGE countries.*

--U.S. Teacher in the BRIDGE Program

- *I gained so much respect for the other teachers and the terrific work they are doing, I developed personal relationships, [and] I felt very inspired by the entire event.*

--U.S. Teacher in the BRIDGE Program

- *I was able to talk to other BRIDGE members and find out how their experience has been in the Program, and how their schools have supported the Program.*

--U.S. Teacher in the BRIDGE Program

- *I can't speak enough about the importance of physical exchanges to fostering understanding, friendship and interest in each others countries and classrooms.*

--U.S. Teacher in the BRIDGE Program

Several U.S. teachers who traveled abroad to Lebanon added the following comments.

- *I was overwhelmed by the great kindness of the host families and school personnel. I will forever be more engaged in understanding the political situation in Lebanon. I also gained the understanding that one teacher can make a huge difference through the BRIDGE opportunity to impact students.*

--U.S. Teacher in the BRIDGE Program

- *I was able to understand the culture, customs and traditions from the country I visited.*

--U.S. Teacher in the BRIDGE Program

- *[It permitted me to] get to know the people and see with my own eyes how people feel about us, and let them know how much we appreciate their support to our children.*

--U.S. Teacher in the BRIDGE Program

E. Summary Observations

Overall, the BRIDGE Program is very successful and is achieving stated Program goals and objectives. The very structure of the iEARN approach to virtual exchanges lends itself to Program sustainability, in terms of the online collaboration, skill acquisition, and teamwork. More specifically, because the Program enters individual schools via the engagement and commitment of teachers, Program activities are centered in and focused on the classroom. As these teachers join the Program and become involved in Program activities, they develop their capacities and skills as implementers of the online activities. The structure of the project-based approach to online collaboration also enables both students and teachers to exercise a great deal of initiative, which gives the Program flexibility as well as staying power.

Understanding the needs, constraints and motivation of the BRIDGE teachers is very important. The BRIDGE Program depends entirely upon the goodwill of classroom teachers and those teachers who volunteer as Master Trainers/mentors. Its effectiveness depends on the motivation and initiative of these teachers to engage in Program activities, outside of their normal course-load. Without the enthusiasm of the teachers, the Program would not build momentum and sustainability; teachers also encourage other teachers to join the Program. Teachers enjoy learning, and they have found the interactive nature of the online fora to be stimulating, both professionally as well as personally. All of the teachers interviewed are very excited about the new relationships they have developed online, with teachers from the United States and/or other countries in their regions.

In some countries, the Program appears to be more active than in others. In particular, Lebanon, Egypt, Morocco and Pakistan are cited numerous times on the iEARN website. These countries have teachers who enroll in and complete online courses as well as facilitate online fora. Students from these countries participate in the regional BRIDGE/iEARN conferences and physical exchanges, and publish their activities online in the form of newsletters or websites. Lebanese students and teachers also specifically mentioned their online correspondence and friendships with colleagues from Egypt, Morocco and Pakistan.

In-country workshops appear to be the key to recruiting new teachers and enhancing the involvement of those already in the Program. Many teachers need these workshops in order to receive essential training in computer use and Internet access/tools, in addition to the more content-based training focused on integrating online learning into the classroom.

Finally, it is clear that participation in the BRIDGE Program and online fora improves the English skills of both the teachers and students. Roughly seventy percent of all BRIDGE online projects are conducted in English. This provides a hands-on approach to English language skills development. Furthermore, the selection of BRIDGE teachers, based on English language skills, ensures that English will be incorporated into Program activities. Teachers have noticed that the online fora and collaborative online projects have resulted in noticeable improvements in the BRIDGE students' English language skills, especially writing and self-expression. The online fora also serve as good instructional tools for English teachers. BRIDGE English teachers in Lebanon have taken advantage of the online fora and online resources to update and expand their curricula. They have also used the online fora for class exercises in English writing and reading.

5

THE SCHOOL CONNECTIVITY PROGRAM IN TAJIKISTAN

CIVIC EDUCATION AND COMMUNITY BUILDING

Chapter Five

A. Introduction

The Tajikistan School Connectivity Program (TSCP) has been implemented by Relief International – Schools Online (RI-SOL) since its inception in the fall of 2003, making it the most recently initiated of the four Programs reviewed in this evaluation. The primary focus of the TSCP is to promote educational reforms (the adoption of new approaches to teaching and integration of IT in the curricula); to create specific projects on civil society and community building; and to further mutual understanding and establish direct ties among Tajikistani and U.S. partner schools.

This chapter provides a brief summary of key findings and an overview of the TSCP, and reviews content and curriculum, teacher training, and specific Program activities. It includes an assessment of the Program's effectiveness in reaching specific State Department and Program outcomes. The chapter is based on **quantitative and qualitative data**, including reviews of Program documents and websites, interviews with key informants, and findings from a site visit to Tajikistan, as well as online survey data collected from community members. The Evaluation Team conducted the site visit from April 20 to April 30, 2005.

B. Key Findings

1) *Mutual Understanding*

- Contacts with individuals from the United States (virtual and in-person interaction) were especially valued by students and teachers.
- While most of the real work of mutual understanding occurs in the context of formal projects or online fora, students clearly used access to the Internet provided by TSCP to develop their own ties with young people in the United States, via e-mail and instant messaging.
- TSCP has collaborated with the SCP in Uzbekistan (USCP) to develop a weekly cross-border forum between Tajik and Uzbek students, contributing to real dialogue and exchange between these neighboring countries.
- Students attest to the degree to which participation in the TSCP has broadened their exposure to the wider world, and to the wealth and complexity of human knowledge in ways that no other activity would have made possible.
- The TSCP Internet Learning Centers (ILC) have had an impact on community members. Half or more of the community members report that their experience with the ILC has

changed, either moderately or substantially, their knowledge and understanding of U.S. values (55.8%) and culture and daily life in the United States (49.3%).

2) Educational Reform

- TSCP has assembled a small but qualified cadre of teacher trainers who are now well versed in introducing new methods and a new philosophy of teaching to classroom teachers.
- Teachers, including those with no prior experience, have begun to use the Internet to supplement and expand their teaching materials and to orient students to available resources online.

3) Skills Development

- TSCP synthesizes classroom-based projects and skills learning of *both* teachers and students.
- Community members have gained valuable skills by using the ILCs and interacting with the ILC staff. Eighty-five percent of the community members surveyed indicate that their computer skills have increased since they began frequenting the centers, and 62 percent of them report that the center has had a large impact on improving their English language skills.

4) English Language Instruction

- Many students who may speak Tajik or Uzbek at home reported that their work on the projects and at the ILC has improved their knowledge of English.
- A TSCP Onsite Educator (teacher trainer) has developed a country-wide, web-based English Club (<http://www.english.tj>) to foster support for English language instruction at the ILCs.

5) Civic Education and Community Building

- The TSCP online fora reinforce the project's focus on civic education.
- TSCP places strong emphasis on volunteerism: the 2005 and 2006 Global Youth Service Day (GYSD) has been a major vehicle for students to participate in activities such as teaching community members how to use computers, fund-raising for the elderly, visiting veterans and orphans, and cleaning a park.
- The use of the TSCP ILC by members of the community has enhanced the civic engagement of these communities. Half of the community members surveyed report that the centers have been used to host or facilitate meetings to discuss local issues and 57 percent say that their own volunteerism and community service has increased.

6) Impact on Young Women and Girls

- TSCP appears to be especially beneficial for girls and young women; in most schools, girls are a majority in the project groups and are well represented among ILC users. Frequently, more girls than boys visit ILCs during free hours.

- TSCP has given a ‘voice’ to girls and substantially strengthened their self-confidence. Teachers reported that young women who participated in the project were more self-confident than those who did not.
- Multiple observers reported that the Program acted as a motivation for young women to remain in school. Teachers and school directors report that it is not uncommon, especially in small towns and rural areas, for girls to leave school after ninth grade. The interest and excitement engendered by the project reportedly have kept young women in school to its completion at the end of eleventh grade.
- Young women are learning about technology and mastering significant computer skills at the ILCs, skills that will increasingly be in demand in the Tajikistan labor market. While the status of young women may have declined in general since the end of the Soviet Union, the project provides many young women with a background that will aid them in their future careers and increase their ability to contribute financially to their families and to Tajikistan’s development.

7) Strength in Project Implementation

- TSCP has demonstrated strong ability and foresight in partnering with other NGOs in Tajikistan (e.g., Babylon-T, CARE, and IFES). These partnerships have enabled the Program to achieve a wider reach and depth in its activities.

C. Tajikistan SCP Program Description

TSCP’s primary objectives are to establish small ILCs in selected schools throughout the country, and to mobilize teachers and students to participate in active learning projects, through the use of newly-introduced computer technology and access to the Internet. TSCP is also charged with developing partnerships between these and U.S. counterpart schools. TSCP’s professional development activities for teachers, and its Program for students, focus especially on activities that promote civil society and advance mutual understanding between U.S. and Tajikistani²⁵ participants. The ILCs are also open to the broader community, both to students who were not selected to be in the core “project groups,” as well as parents and other community members.

The long-term goals/outcomes of the TSCP Program are:

1. To build understanding between U.S. citizens/communities and citizens/communities overseas participating in the Program, and among countries, regionally and internationally. Engage partner schools in on-going communication and collaborative projects that generate personal and institutional ties.
2. To catalyze and assist education reforms, including project-based learning, collaborative learning and using technology in the classroom.
3. To develop skills and knowledge for teachers, students, regional coordinators, trainers and other participants.

²⁵ The term “Tajikistani” is used to refer to the people of Tajikistan in general, who may be, ethnically, Tajik, Uzbek, Russian, Kyrgyz, or of some other group.

- Promote information literacy – the ability to access, use and evaluate information from the Internet in order to enhance learning, solve problems and generate new knowledge.
- 4. To build sustainability in terms of resources, activities and linkages.
- 5. To support civic education and community building.

After RI-SOL was awarded the project in mid-2003, the team in Dushanbe immediately set out to establish contacts with potential participant schools around the country. With ECA approval, TSCP began working in ten schools by October 2003, in locations where their ISP, Babylon-T, could rapidly expand. By April 2004, the project moved into the second group of ten schools, and, in late 2004, TSCP expanded into the final four schools for a total of 24 schools.

TABLE 5.1 TSCP Schools and Participants			
Region and School	Location	# of Students	# of Teachers
Dushanbe			
Dushanbe #10	Dushanbe	950	43
Special School for Deaf Children #8	Dushanbe	133	17
Regions of Republican Subordination			
Lenninsky Gymnasium	Rudaki	660	34
Secondary School #139	Vahdat-Rohati	901	41
Secondary School #2	Gissar	1,024	45
Secondary School #101	Tursunzade	2,800	112
Secondary School #18	Shahrinav	744	47
Secondary School #35	Faizabad	1,061	45
Khatlon Region			
Secondary School #12	Kurgon Tepe	3,794	305
Secondary School #40	Kulob (Chorbogh)	923	39
Lycee #1	Kulyab	517	38
Secondary School #3	Nurek	1,460	54
Secondary School #1	Sarband	2,279	81
Secondary School #1	Vaksh	1,688	68
Secondary School #10	Vose	1,258	50
Sugd Region			
Gymnasium #4	Khujand	1,600	120
Secondary School #16	Gulakandoz	1,640	119
Secondary School #4	Chkalovsk	726	36
Secondary School #32	Istaravshan	1,170	63
Secondary School #3	Kanibadam	1,186	71
Secondary School #14	Kayrokkum	1,362	70
Secondary School #1	Isfara	1,044	64
Secondary School #1	Ayni	680	53
Gorno-Badakhshan Autonomous Oblast (GBAO) Region			
Secondary School #2	Khorog	584	60
Totals		30,184	1,675

Source: http://www.connect-tajikistan.org/en/sc_tajikschoools.html, February 12, 2006.

1. Partnerships with Other NGOs and Organizations

A very strong feature of the TSCP has been its foresight – and ability - in partnering with other organizations. These partnerships have enabled the Program to achieve a wider reach and depth in its activities. The synergies that TSCP developed with the ISP Babylon-T and with CARE have been critical for the establishment and expansion of the Program in Tajikistan. TSCP worked closely with Babylon-T in negotiating an expansion plan which extended the network to

remote areas. In addition, TSCP utilized CARE's knowledge in implementing the Program: CARE suggested that TSCP consider three schools in areas where CARE had already done substantial work in community development. The mobilization of community leadership resulting from CARE's efforts provided an excellent foundation for community participation in TSCP when it selected schools in those communities.

TSCP has established several partnerships with other organizations in order to implement the Program. Most important has been IFES (formerly, the International Foundation for Electoral Systems), which supports civic education globally. TSCP has turned to IFES to develop a Civics Education Textbook and a Teachers' Guide in Tajik, Russian and English. IFES has also focused on the development of Student Action Committees (SAC) in the second year of its partnership with TSCP.

TSCP has also partnered with Junior Achievement and ORA International (an NGO that works with disabled children and youth). The international NGOs, ACCELS and IREX, collaborated with TSCP: ACCELS to host a drug awareness seminar on Global Youth Service Day and IREX in the arena of civic education. Several local and regional NGOs have also joined forces with TSCP to provide training and seminars to TSCP students. These include ITTIFOK ("Union" in Tajik), which works in the northern Ferghana Valley with a focus on peace building between Tajiks and Kyrgyz (which led a series of seminars on conflict resolution in that northern region); Sodaat, which has drawn on IFES materials to give training in human rights issues to TSCP participants; and community-level NGOs throughout the country that have repeated IFES's human rights training in their home cities throughout the country.

D. TSCP Program Activities

To reach the long-term Program objectives mentioned above, TSCP (and its ongoing successor, GCEP) have organized the Program around the following primary activities:

- Development of ILCs in Selected Schools;
- Staff and Teacher Training;
- Collaborative Projects Based on a PBL Model;
- Online Fora;
- Teacher Exchanges; and
- Conferences and Workshops.

1. The Internet Learning Centers

The ILCs are established in the selected schools, and typically have about six computers available for Program use and a seventh for the center manager. The Program provides the computers, modems, and limited equipment. (There may be other computers in the school, but they are often obsolete computers from Soviet times that are used for "informatics" classes.) Communities have contributed desks, tables, and furnishings for the Center. The ILC becomes the center for many of the TSCP activities, with teachers, selected student project group members, other students, and community members using the ILC as a center for meeting, learning, and communication.

The ILC is normally staffed with a full-time Onsite Monitor (OSM) as well as a part-time Onsite Educator/Master Trainer (OSE), who may be shared between two or three schools. The OSM's role is to track users, monitor use of the Center, ensure that all the conditions in the Center are safe, and to oversee in a general way the functioning of the computers and the Internet connection. The OSE is an educator in the first instance, and while this person should have a willingness to learn about computers, this was not a prerequisite for the position, as OSEs receive training on computers and IT.

The ILCs operate generally in the same way. In the majority of schools, students and community users do not have access to the ILC during the morning hours of the school day. This provides the OSE and OSM time to concentrate on project responsibilities, such as materials preparation and communicating with colleagues at other centers. In many schools, students may stop in during the day to consult the Internet for some purpose related to their classes, or to check their email.²⁶

As the school day ends, the ILC becomes a busy center of activity. At least several days a week after school, the "project group" assembles and group members work with the OSE, and perhaps one or two lead teachers, on the current month's project. The project group is made of a core group of 15 to 25 students largely studying in ninth through eleventh grades (the last year of secondary school in the Tajikistan system). These project groups then meet regularly to carry out specific projects that are suggested and designed by the RI-SOL staff in Dushanbe. All such project learning is done after regular school hours, on the students' own time. Hours are also set aside for ILC use by students who are not part of the project group. This may include students from the school where the ILC is located and students from other schools in the community (who may have regularly scheduled hours reserved for them alone). With few exceptions, ILCs also offer open hours to the community, when anyone – parents and friends of students, local government members, journalists, and the public at large – can take advantage of this resource for communication and learning.

2. Staff and Teacher Training

a. Staff Training

TSCP provided the OSEs one week of intensive training the first year. Four OSEs were selected to serve the Dushanbe "Region of Republican Domination" in the central and southern areas, three were chosen in the culturally and geographically distinct northern region centered in Khujand, and one for Khorog and the Pamir. These eight became the main recipients of TSCP staff training; the OSEs then brought their training to the teachers at their schools.

Training of the OSEs was designed to be experiential and "hands-on," to provide them with ways of communicating well with the lead teachers – the main teachers selected to work with TSCP and the project group. The training focused not only on developing technical skills for computer use, but also on providing the teachers with information on how computer skills can be useful for

²⁶ As mentioned, in a few cases, the ILC shares its space with obsolescent computers acquired in earlier times for school "informatics" classes, and the space may be used for that during daytime class hours.

teaching and supporting their work in the classroom. Developed by a reliable external consultant, the design of the curriculum had its origins in earlier work done by RI-SOL in the Balkans and the Middle East. RI-SOL staff reviewed the draft materials, and then the course developer and a RI-SOL staff member traveled to Tajikistan for a week-long training course with the OSEs in November 2003. This took place as the first group of ten schools was just getting equipped.

In the training course, the OSEs learned about methods of experiential and project-based learning and then put those models into action. The goal was to show the OSEs how, through discussion and brainstorming, they could put the methodological content into practice. According to TSCP reports, several participants commented later that they now understood the experiential approach in a way that they had not previously, and that they were successfully able to move from a theoretical understanding to a more hands-on one. As part of the training, the OSEs developed their own lesson plans, later analyzed and critiqued by the trainers, along with their fellow OSEs.

A few of the original OSEs left the Program after their training. TSCP recognized that these recruits did not have the skills and motivation needed to be successful. Indeed, project staff reported that it was difficult to find people with the necessary qualifications, and that some recruits were less than ideal candidates. For example, they selected former teachers for training; however, TSCP found that many of the more mature, Soviet-trained teachers often exhibited an overly rigid mindset, needed a well-specified set of instructions to follow, and were uncomfortable with developing their own specific plans of action based on a thematic outline. This clashed with the intent of the new training curriculum, which counted on the OSEs to take general principles and apply them to their cultural context, developing appropriate exercises and examples.

The modules provided the trainers the basic framework, but the OSEs were expected to adapt them, to develop and design their own activities, based on the themes in the training. TSCP found that they had to provide the OSEs a certain amount of “hand holding” at the beginning, helping them to design templates to use as they adapted the curriculum. By the time of the evaluation visit, however, the OSEs had overcome these initial qualms and had expanded their capacities to carry out this independent work.

Once the OSEs were working, they were required to meet regularly in regional groups or circles, which forced them to discuss their progress and obstacles. Because some of the OSEs were particularly good in IT, and others in interactive learning, the circles facilitated the sharing of their strengths. Due to the cost of the group training of the OSEs, the initial group was the only one to receive this intensive modality. Subsequent OSEs received training that was more circle- and distance-based. New OSEs were provided with the training materials, and then learned and practiced their skills while meeting with other OSEs and online, especially through the use of online messaging.

b. Training the Teachers

TSCP recruited “lead teachers” in each of the schools that were joining the Program. A RI-SOL Field Program Officer modified the proposed curriculum of technical and project skills training by dividing it into smaller modules. The OSEs could use the more flexible teaching modules

under various circumstances, such as during shorter training periods, rather than in more formal workshop formats.

The first training for teachers consisted of a brainstorming session about the uses of IT in education. The OSEs asked questions such as:

- What do you know about computers?
- What do you know about the Internet?
- What can you do with computers?
- What problems do you have teaching your class?
- What could you and your students learn from teachers and students in other countries?

This sparked discussion during which the teachers were encouraged to assemble what they already knew about computers (even if they did not know how to use them), as well as to review their misconceptions and fears. The OSE introduced IT as a general tool for learning rather than as a technical instrument for specialized work. In the context of these discussions, teachers were able to raise many problems they had with their classes (inattentive students, lack of textbooks and materials, etc.), and the OSEs explained how these could be solved through the use of IT.

Central to the objectives of the project, the teachers were also introduced in the second training session to PBL. The OSEs shared the concepts behind PBL and its applications. The OSEs and teachers drew on the following framework:

1. PBL is learner-centered;
2. The project is a concrete issue or problem;
3. Students find the projects challenging;
4. Projects involve the creation of a product;
5. PBL is collaborative;
6. Revision and continual improvement is encouraged;
7. There is definite teacher facilitation; and
8. The project should help achieve the overall goals of education as well as specific goals in the classroom.²⁷

Finally, most lead teachers had little exposure to modern computers and the Internet. During the school breaks in the winter of 2003, and when opportunities arose, such as new schools joining the Program, the OSEs offered teachers basic skills training – how to operate the hardware, use the mouse, and basic Windows functions. Teachers also learned how to use Microsoft Word, email functions, and how to explore the Internet with web browsers.

As time passed, new schools entered the Program and new teachers were hired in those schools already participating. They received the same training in basic computer and Internet skills, the use of IT in the classroom, and PBL. For example, in Chkalovsk, in the north, major changes in the school management led the TSCP team to select a new group of lead teachers to replace others who had not been active.

²⁷ Cited in "Program Report #2 – Fourth Quarter 2003" of the TSCP report prepared by RI-SOL for ECA, January, 2004, p. 5.

3. Collaborative Projects: Project-based Learning

For us to start, the most interesting activity was My Community, where the students could make their own website about their community, school, and city. Of course, we learned a great deal - it taught us how to use different kinds of software, and also how to make a website.

- Student from Isfara

The role of the lead teachers is to work with students who have been selected to participate in that school's project group, devoting most of their efforts to the after-school support of the groups as they worked on the monthly collaborative projects. The OSEs worked both with lead teachers and project groups.

Most of the schools, both in Tajikistan and the United States, participated in an initial Program called "My Community," which encouraged the participants to create a website that presented their hometowns and schools, a task designed primarily for their partner school but which was, of course, available for all. Students reported that this was a significant learning experience for them.

According to TSCP reports, the first step of "My Community" was a discussion of the "Family & Society" chapter from the IFES civics textbook, which deals with various family structures and their relationship to the economy, culture, and the state. Students then studied different family structures in their own towns, conducting a survey of their own families and of the community at large. Using Excel, the students made charts of the survey results for a "Graphing Families" activity. The curriculum outline then provided a model for students to broaden their community profile, guiding them in exploring the wide variety of elements that make their community unique. This required the students to gather articles and documents, take photos, interview officials and community members, visit museums, and then design a website that allowed them to synthesize all these sources to depict their home towns. Students used digital cameras for photos, learned how to edit graphics in Adobe Photoshop, designed their websites in Microsoft Front Page, and produced sites that they could share with their partner schools in the United States and fellow TSCP schools in Tajikistan. The sites remain available on the TSCP/GCEP website.

For the 2004-2005 school year, "A Day in the Life of a Student" was the first collaborative project with the U.S. schools. As several new schools in the United States were joining the Program, and since new students were also coming on board, this was phased as an introductory exercise for both countries. In this way, students and teachers could better understand each others' lives before the students moved on to other activities. The OSEs conducted training for the lead teachers on the activity, and teachers were able to use new technical skills that they had learned during the previous summer.

Other topics ranged from cultural themes such as national holidays and holidays around the world, to serious discussions on problems of teenagers, and exploring citizens' rights and responsibilities (see Text Box A). In October 2004, for instance, with a number of topics already completed, TSCP staff selected elections as the theme. Lead teachers were quoted as saying that this activity was difficult for them, but they worked hard to understand the entire electoral

process, which they, in turn, explained to their students. TSCP staff noted that teachers were asking questions which came out of their own research and thinking, drawing on new and unfamiliar information. One of the main reasons for this was that they were already familiar with the structure of PBL activities, as well as with computers and the Internet, and thus were able to focus less on technical concerns and more on the educational aspects of the activities.

Text Box A – Illustrative Project Topics

- My Community
- One Day in a Student's Life
- International Cuisine
- Problems in Teenagers' Lives
- Holidays and World Religions
- Citizens' Rights and Responsibilities
- Global Citizenship & Youth Philanthropy (GCYP)
- Identifying Issues in Elections
- Personal History
- Conflicts in Our Daily Life

4. Online Fora: School Connectivity Website

Another principal focus of TSCP is the creation of online fora. Some of the fora are linked to the monthly collaborative projects based on the TSCP lesson plans, so that Tajikistani and U.S. students may comment on what their partner has produced. Some function as online seminars, in which students are able to pose questions and observations to an invited guest. Other fora are organized by TSCP staff, with a staff person setting up an additional theme or topic and inviting student participation over a period of time, whenever they log on. These fora are conducted in multiple languages, including Russian, English, and Tajik.

Text Box B provides a list of some of the forum topics over the past few years.

Text Box B – Illustrative Forum Topics

- | | |
|---|--|
| • Winter Holidays | • Migration - The World of the <i>Gastarbeiter</i> (Guestworker) |
| • Global Recipe Book | • Music around the World |
| • Forum for FLEX Students in America | • Youth in Action |
| • Forum about the Personal History Activity | • Tajikistan-Uzbekistan School Connectivity Forum |
| • Forum for TSCP Students about Problems Faced By Teenagers | • World AIDS Day |
| • Meeting American Diplomats | • Poems about my Motherland 1/05 |
| • Forum about Holidays in the United States and Tajikistan | • Martin Luther King Day |
| • Foods around the World Forum | • The Important Role of Women in Society |

In addition, TSCP has opened a series of related fora that provide tools for a variety of allied purposes, such as fora for members of SACs (discussed below), for participants in specialized projects that are not formally part of TSCP, such as UNICEF's health education efforts and special e-journal fora for U.S. visiting teachers. (UNICEF worked with RI-SOL to fund five ILCs to train its youth participants in a Hygiene Awareness Program, for ten weeks in 2004. The group had its own online forum). An example of the latter type of forum took place in the fall of

2005, when Brent Beemer, an officer from the State Department's Bureau of Educational and Cultural Affairs, conducted an online chat for all 24 ILCs. Mr. Beemer had visited the ILC at the Islamic University in Dushanbe where students (including some online participants) posed a series of questions concerning exchange programs, the prospects for visiting the United States, the possibility that more American youth might study in Tajikistan, and about Muslims in America.

TSCP has also taken the lead in using the fora to increase communication among youth in the region. This has come through the cross-border discussion fora held jointly with the Uzbekistan School Connectivity Program (USCP). TSCP staff met with the Tashkent office of IREX, implementers of the USCP, early on in the project to learn what they could from them. The two groups developed the idea to establish weekly Friday fora among schools operating in both countries. The languages typically rotate week by week, among Uzbek, Tajik, Russian, and English. Topics have ranged widely. One English session was dedicated to an interview with Ari Katz, the IREX manager for the USCP in Tashkent. Both projects keep track of the fora, and discussions are archived.

In October of 2004, the cross-national forum discussed questions related to Western culture and its impact. Students in both countries largely saw positive elements in their contact with Western culture; one young woman in Nurek was quoted as saying, "The influence of Western culture is positive. We try to look like them, wear the same clothes and have the same way of life. We like western movies, watch them and learn more about western people." Teachers were more circumspect, pointing to the violence depicted in popular movies and arguing that the lack of civility expressed in Western movies was not something that Tajikistani youth should emulate. It was clear that Tajikistani students take advantage of the fora and contribute to them, especially on topics that stimulate their interest. Much of the discussions take place among students in Tajikistan, although U.S. students do occasionally participate, most notably in the fora specifically related to partner schools.

5. Teacher Exchanges

The original proposal for TSCP called for a single visit by Tajikistani teachers to the United States. In a mid-2004 amendment, a reverse trip, by U.S. teachers to Tajikistan, was added to the Program, and this took place in February 2005. A second trip by three U.S. teachers took place in April 2006.

a. Teachers from Tajikistan Visit the United States (September 2004)

Five Tajikistani teachers came to the United States in September 2004. These teachers traveled to Los Angeles and took part in an active program at UCLA which focused on the integration of IT into education. The training also dealt with curriculum development in the context of IT, and the sessions covered such issues as backward planning, standards, and developing lesson plans around goals. The training was also designed to build on teachers' existing IT skills, such as integrating PowerPoint into lesson plans.

By all accounts, the trip was very successful. Visits were conducted to several important sites, including two partner schools, High Tech International in San Diego and Delano High in Delano, California. Three of the teachers interviewed during the evaluation were highly enthusiastic

about the exchange experience and described it as a high point in their professional development and in their lives.

b. U.S. Teachers Visit Tajikistan (February 2005)

From February 20 to March 10, 2005, six U.S. teachers traveled to Tajikistan. All were selected from partner schools and had been involved in the Program for at least a year. UCLA made the selection and provided a short orientation before departure. The teachers then traveled to Dushanbe and set off on a 16-day tour of schools throughout the country. As opposed to the training focus of the Tajikistani teachers' visit to the United States, the U.S. teachers focused on contacts and networking. They visited schools, met with teachers, students, and local officials, and worked to cement ties of friendship and mutual understanding.

A second visit by three U.S. teachers to Tajikistan took place in April of 2006. As in the previous year, the teachers visited three main regions: Dushanbe and the central area; several cities in the Khatlon region of the south; and, traveling by plane, the Sugd region in the north, forming part of the Ferghana Valley. The visit also focused on contacts, friendship, and exchange. The teachers made presentations about their home schools, while their Tajikistani hosts organized many cultural and social events for them, complete with "welcoming speeches, presentations, and poems about their city and country, not only in native languages but also in English."²⁸

While these exchanges are *not* a core component of the Program, it is clear that they serve on both sides to heighten interest and to create warm ties. The U.S. teachers' visits were especially useful for TSCP staff (the OSEs and the OSMs) as well as for lead teachers, because it demonstrated that the U.S. commitment was real.

6. Project Conferences and Workshops

After the original training for OSEs that took place early in the project, TSCP did not often bring together its widely dispersed staff, so as to keep operating costs low. Under the new Global Connectivity and Exchange effort, field staff were able to meet for a three-day seminar in June 2005 and again in 2006. At other times, TSCP staff has effectively used electronic means to work together and stay in touch. All the OSEs and OSMs are in constant contact amongst themselves and with the Dushanbe main office, since they are required to sign in to Yahoo! Messenger whenever they are at a computer with an Internet connection. It was clear during visits to the main office that Dushanbe staff were in steady contact with staff throughout the country on a daily basis by this means.

When Phase II began in the summer of 2004, TSCP held a conference and training workshop at which the OSE Phase I group trained their new colleagues. This was an effective means of capacity development. They met and got to know each other at the conference, but, in general, the OSEs do not travel frequently for the project, especially from region to region. Again, a group meeting was held in August 2005, when a Training of Trainers meeting was held to kick off the second phase of the Program.

²⁸ Quoted on the GCEP website, http://www.connect-tajikistan.org/en/sc_news.html.

E. TSCP Activities and Program Outcomes

Conversations with students and teachers in Tajikistan reveal a number of direct links between TSCP activities and SCP's long-term goals.

1. Mutual Understanding

The topic of mutual understanding is wide-ranging, since it suggests the importance of many different types of exchanges, contacts, and communications. TSCP has used the principal tools of its programming, the PBL activities on which the school project groups have worked and the online fora, as a catalyst for the kinds of virtual exchanges that lead to knowledge of one's partners and a growing familiarity and understanding of them. The dimensions of these contacts sponsored by TSCP are so extensive as to make categorization difficult: from interactions about daily life and school, to descriptions about cultural practices in each country (such as holidays, music, or cuisine), to substantive discussions about human rights and democracy or the problems faced by teenagers. All of these have been the focus of dialogue between the students from Tajikistan and the United States.

We have a partner school in the USA. We ask each other about how they study, what keeps them busy, and what the difference is in time between our countries. We were surprised to learn that our counterparts in the USA are able to take the school subjects that they like – this is something that we can hardly believe! But this fact has been confirmed for us by Tajik students who came back here after studying in the USA.

-- Student in Tajikistan

Students reported that they were also interested in knowing which holidays are celebrated by Tajikistani and American people. In one project and associated forum, the Tajikistani students from the town of Shakrinav described Ramadan and other religious holidays, depicting how people behave, what they cook and eat for the holidays, and what activities they observe and avoid on those occasions. The Americans talked about the Fourth of July and Thanksgiving, and how these are celebrated in the United States. The students in Shakrinav apparently did their best to celebrate Thanksgiving Day that year in the American style, inviting schoolmates to share the meal.

The efforts to foster direct "virtual" contact can serve to mobilize relationships in an ongoing way. An example of this is the project in which TSCP and IREX joined forces to highlight the sister city relationship between Dushanbe and Boulder, Colorado.

One forum, designed to foster communication with American students in Boulder, Colorado, lasted for a month and a half. In those online discussions, the Americans wanted to know about what the youth did in Tajikistan and how the people lived there. Many participants from the United States knew some Tajik words and also talked about what they understood as the underdevelopment of this country... They also asked to be told about traditional dishes and the personal names of Tajik people as well as about holidays, customs and traditions.

-- Student in Tajikistan

Topics such as student rights, and human rights more generally, have been discussed by students.

By comparing educational systems in the United States and Tajikistan, the Tajik students saw that the relationship between teachers and pupils is based on a more egalitarian model in the United States. They understand that American pupils' sense of rights and legality is more highly developed, and this stimulated the Tajik students to learn more about how to protect our own rights. Further, we were introduced in a training session to laws related to children, organized by specialists from Kazakhstan. After that, young people who held back before began to change – they became freer and more expressive and demanding of their teachers.

-- Student comments from Focus Group in Shahrinav, Tajikistan

According to focus group participants, one of the discussions between American and Tajikistani students focused on the Convention of the Rights of the Child. This project led to a debate on an issue of importance in Central Asia - violence, human rights and the abuse of children. Families in the region occasionally still force their daughters to marry someone whom the daughter either does not know or does not care for. A volunteer trainer from the State Committee on Youth set up a seminar on forced marriage of young girls to inform the students and expose them to a range of views. Students are aware that families formed in this way may be fragile and easily weakened. Through fora on human rights, freedom of speech, and democracy, participants in Tajikistan have been exposed to new ideas and, according to one Tajikistani student, “now have strong convictions in that every human being can express his or her opinions.”

The Internet is very important for me. Since I was little I have been fond of English. It was my dream to make friends with someone from the United States, and, thanks to the Internet, my dream came true.

- An ILC Project Group Member

These contacts have also permitted the Tajikistani students to teach the Americans about their country. On many occasions, the Tajikistani students were surprised to learn about the perceptions that Americans held of their country and were anxious to set them straight.

- The Americans conveyed to the Tajik students their perceptions that Tajikistan is a country where people traffic in drugs, organize acts of subversion and terrorism and even civil war, and the Tajikistani students were able to disabuse them of these ideas.*
- They think that we are very poor and underdeveloped. We explain that life is normal here. They ask about youth, what we do. Then we were able to tell them that Tajikistan is a hospitable, friendly place with loving relationships, and their opinion changes. Even not coming and seeing Tajikistan, but just getting information from pen pals, their opinion changes, they change their views. I have many friends whom I met online, and sometimes I meet new people who come here.*
- They asked about where we live and what our living conditions are like. They were usually surprised, because they thought we lived in a world of terrorism and drugs. They only had very partial information. So we wrote about our president, and told them about how the civil war was dangerous and difficult. But we also showed them the 'our community' website, when we did that project. And that is why these fora are needed.*

-- TSCP Alumni

The contacts with the United States were especially valued in discussions with students and teachers. The following kinds of comments were heard throughout the country during the evaluation visits.

- *This school has a partner school in the USA in Delano, California. The USA used to seem so far away in the past, but now it appears to be close to Tajikistan, owing to the communication opportunities of [the] Internet.*

-- Student in Tajikistan

- *We've been able to talk many times with people from the United States while we were doing the "My Community" exercise.*

-- Teacher in Tajikistan

- *We have U.S. partner schools. For instance, we typed up our presentation – how we live, how we study, and they sent one that they did, all about their way of life. And we talked with IM messages with the teacher. And then we were able to meet the teacher when they came in the March visit!*

-- Onsite Educator in Tajikistan

While much of the real work relating to increased mutual understanding takes place in the context of the more formal projects and fora, students in all schools visited in Tajikistan clearly used the Internet access provided by TSCP to develop their own ties with young people in the United States, via email and instant messaging. Many spoke of their contacts with young people from partner schools and with others who they had managed to meet by some means. RI-SOL also takes advantage of GCEP projects that it implements in Afghanistan, Palestine, and Bangladesh to foster contacts among young people in Tajikistan and those countries. RI-SOL has been able to use these parallel projects to great effect, such as designing projects that students from more than one country work on together (for instance, in 2006, GCEP students in Tajikistan and Bangladesh worked jointly on projects relating to the World Cup tournament and to International Father's Day). Likewise, the cross-border fora with the IREX-implemented GCEP in Uzbekistan have added to the ability of TSCP participants to know and understand their neighbors.

Furthermore, in their free time on the Internet, students followed their interests and predilections when searching for information. Young people, both boys and girls, were aware of figures in popular culture and sports both in the United States and internationally. They sought out ways to communicate with other youth through lists and fora. They were also aware of world events, following the headlines on the standard web portals such as www.rambler.ru and www.yandex.ru.

The Internet remains the main information source for these students – all they know about culture, customs, traditions, occupations, and education in the wider world has happened due to [the] Internet.

-TSCP Lead Teacher

Time and again, students in Tajikistan expressed how the opportunity to take part in the project and to gain access to the Internet at the ILC had changed their lives. All of them use e-mail or chat rooms to communicate with acquaintances, friends, and relatives around the world. Besides the many cities and towns in the United States, also mentioned were Afghanistan, Pakistan,

Tatarstan, Bangladesh, Palestine, Egypt, Ukraine, Russia, Kazakhstan, Uzbekistan, and Germany, among many others. The ability to use the ILC and the skills they gained opened them to the wider world in a way that they could not imagine. One young woman confessed ruefully that “information from the Internet confirms my lack of knowledge. I seem to think I know everything, but when I surf the Internet, it turns out that I know nothing.” While this may be humbling for the student, it also indicates the degree to which participation in the TSCP has broadened her understanding (and that of her fellow participants) of other countries and of the wealth of human knowledge in ways that no other activity would have made possible. As one lead teacher in Isfara put it, “Before, I didn’t know how to use the computer and the Internet. We had the old Soviet computers in the school. When the students learned about the Internet and realized it was a network with the whole world, their interest exploded.”

2. Educational Reform

For the SCP Programs overall (though with less emphasis in the documentation relating to Tajikistan), one major Program goal is the effort “to catalyze and assist educational reforms.” Four such reforms are mentioned:

- Transforming Soviet and traditional modes of instruction;
- Integrating project-based and collaborative learning;
- Integrating technology into curriculum across disciplines; and
- Securing institutional reforms – organizational, administrative, and policy-focused.

Any process of reform is a slow process, yet TSCP has had some success in initial steps. Indeed, the teacher training model that TSCP has developed emphasizes three of the four transformations mentioned -- new modes of instruction; a focus on project-based and collaborative learning; and the incorporation of technology into teaching. Further, the project has assembled a small but qualified cadre of teacher trainers (in the form of its OSEs) who are now well versed in introducing new teaching methods and philosophies into the everyday actions of classroom teachers.

RI-SOL trained its OSEs in participatory, interactive teaching styles initially through workshops and subsequently by means of training materials, meetings at its head and regional offices, and online coaching. As best as could be determined in the evaluation visits, these have indeed been widely adopted by lead teachers and used in the ILCs by the project groups, such that participating students are exposed to and benefit from these approaches. These contrast, according to comments by students, teachers and parents, with classroom approaches that were used traditionally in the Soviet era and still are employed by many teachers, which rely on a hierarchical classroom model, with the teacher as the source of all knowledge and with minimal student participation.

The lead teachers who have taken an active role in TSCP have gained new skills in the three areas, and many have enthusiastically adopted elements of the new teaching approaches. In this sense, one can see this as a kind of “bottom-up” reform brought about by individual teachers. Here, impact comes from the TSCP teacher training, influencing the actions of individual lead teachers who are involved in the project. A teacher from Vaksh, one of the latter ILCs created and one where TSCP reported that “no teacher had ever touched a computer,” provided a lengthy statement of how she sees teachers changing (see Text Box C). All of these transformations of

teaching are expressed in the collaborative learning projects, which have been the core of TSCP's engagement of teachers and students.

Text Box C

One teacher in Vashk described how teachers have changed:

[Teachers] find recently-published books on the Internet and get books from RI-SOL. They structure lessons like a game! We know now that the teacher should be more like an observer. Also, we use journals, dictionaries and tape recorders in classes. The teachers are teaching pupils in ways that they are extending their own range of knowledge and experience as well as those of their pupils. The main information source for them is www.yandex.ru.

Teachers exploit the method of "live lessons" in classes. Pupils find it interesting, and we find that the older grades understand this better in contrast to the younger. In other words, the students are undergoing changes in themselves and in relation to what they are learning. These new methods of instruction are preferable because they help to ensure that the students have a better understanding of the subjects and it also increases their interest in studying. Now teachers understand that they should be a little like actors, applying visual and group games.

We use several new methods. For instance, teachers divide classes into groups, and group members help each other and support the weaker pupils. We also have the children doing more in class and less at home, as we did under the older teaching methods. We also have teachers making up dialogues in English classes. In our opinion, these interactive methods work better than old methods.

However, the broader integration of these three processes into the formal curriculum and across disciplines relates to the fourth element, securing institutional reforms. This is necessarily a more far-reaching goal and will be a greater challenge to realize. TSCP has recognized that it is difficult to have an impact on the formal national curriculum and on teaching styles across the board, for a variety of reasons. The Program only works with a limited number of teachers, who face a strong culture of resistance to new teaching approaches. Bringing new materials into the classroom also requires extra work and preparation time, with no clear extra compensation. As TSCP stated in a quarterly report;

There are barriers to change that will take a generation to solve. Our internet centers create opportunities, and we have seen more and more teachers come to our centers for information. But the old textbooks still dominate the classrooms; teachers are comfortable with the information and feel threatened by change, [and] directors wait for permission from higher up.²⁹

²⁹ From "Tajikistan School Connectivity Q4-2004 report (v8 US 31 Jan)," p. 16.

3. IT Skills and Research Skills

Young people, both boys and girls, demonstrated in practice and attested in conversation to their ability to use computers competently and creatively. The monthly projects, created and guided by the project office but carried out in each of the ILCs, ensure that participants learn both software applications and Internet research strategies. In terms of applications, students appeared to be familiar with Word, Excel, PowerPoint, Internet browsing, email, and applications such as photo editing and other media software. Teachers, in their discussions with the evaluation team, described how they had begun to use their computer and Internet skills to find expanded teaching materials online and to orient their students to available resources.

An example of this was the “My Community” activity cited earlier, in which each participating school, in both Tajikistan and the United States, developed a website focusing on their town. This activity combined research and IT skills in an innovative way, as described in the following RI-SOL report excerpt:

The schools were provided with a template website in FrontPage, with separate pages for separate themes, such as Where We Live, Where We Study, Our History, Our Media, Our Government, etc. The teacher training focused on one page: People in Our Community. The teachers learned how to collect information, use the digital camera, and build web pages with images, text, and imported files from Excel. Then the Onsite Educators worked closely with the teachers to create lesson plans for teaching My Community to their students in a series of activities over the course of the month. They were trained on how to motivate students, divide them into teams, and how to design rotations to keep everyone busy on a small amount of computers.³⁰

The students went on to use all these IT tools and software: Microsoft Word, Excel, FrontPage, PowerPoint, and digital images to construct the website, as well as drawing on fledgling research skills as they interviewed local notables, compiled documents, visited museums, and pulled it all together in a series of illustrated essays for each page of the site. For the Tajikistani students, the assignment provided the additional challenge of rendering the site in English.

This and subsequent collaborative learning projects have taught advanced computer skills to hundreds of students throughout Tajikistan. As has been noted elsewhere, when young people are given access to computer software and the Internet, many are able to gain skills and expertise rapidly. It takes little time for a motivated student to learn that the Internet itself is a huge repository of knowledge and training, to learn more advanced IT skills.

I just made a table of the names of the project group students and the software and Internet skills that they have, and it is really surprising. Before opening, most didn't know anything about the Internet, just “informatics,” their school computer course with the old computers. I put scores of what I thought their skills on the Internet were, and I found that those going into the Project had a huge increase in their skills. So we picked volunteers to work with novice community users, for example, to show them how to send email. They're using teaching skills that they've gained in the Program to teach community members.

-- An Onsite Monitor in Tajikistan

³⁰ “Tajikistan Connectivity Q1 2004 Report,” submitted to ECA by RI-SOL.

Students and teachers also benefit from new research skills and search the Internet for new materials. They use these materials in their classes, and as a means of learning about specific subject matter, supplementing the curriculum, or developing new projects.

I've taught chemistry here...for 24 years, and I had wanted to use the Internet in my classes, but I had no opportunity. Since the ILC was created, my great desire to learn more has been fulfilled. I learned a lot about what teachers of chemistry are doing in other countries. I incorporate the Internet into my lesson plans, and my students have to go do research to do the assignment. I've found sites where I've gotten many ideas for teaching my classes.

- An ILC Lead Teacher

The PBL model has encouraged student project group members to explore the Internet as they research the themes of the month. Students discussed how they drew on the Internet to research their topics and prepare their collaborative projects, which they shared with partner schools and others. They have taken on a range of solid research topics, a number of which have already been described (including such topics as migration, citizens' rights and responsibilities, and various themes relating to national culture -- folklore, holidays, cuisine, and weddings) and used Internet resources to compile information and to analyze it for short reports.

In addition, students take advantage of access to the new, online sources of information for their regular academic studies. In discussions with various stakeholders, a repeated theme was how access to the Internet had opened up a world of information and knowledge to them, including the following comments.

- *The students prefer to obtain new information, for example on history and culture, from the Internet, instead of referring to old books. They now complete homework given to them by going on the Internet, and they regularly and often surprise teachers by their deep knowledge of different subjects.*

-- A high school teacher in Tajikistan

- *I use the Internet in all my studies. There are no new books here, but we use the Internet for new materials. For whatever I need, I use the Internet.*

-- Alumna of the ILC in Dushanbe

- *All of the participants had not had any experience in using Internet and handling IT before the ILC began to function. So for these people, the opening of the ILC was a good opportunity to see the world and communicate with people around the world.*

-- An Onsite Monitor in Sugd

- *We need to be able to find new information on different subjects, and active students and graduates find it on Internet sites. Libraries at schools and universities contain old information resources and the new world requires being agile in getting the right information. For example, one of the participants is a student at the Technical University. Her major field of study - communications - requires her to be reading new, updated literature renewed all the time. She goes straight to the Internet when she needs up-to-date information.*

-- A school official in Dushanbe

4. Self-esteem and Gender Equity

Beyond skills related to information technologies and academic research, it is also clear that participation in TSCP has led many to a sense of greater self-esteem. One school principal described how “she has seen with her own eyes how the students who work in the Center have become active and independent protagonists in finding information and gaining knowledge via the Internet.” Students of both sexes talked in group discussions about how they were more confident. One young woman in Vaksh, one of the most rural and isolated communities in the Program, reported that “we are not afraid of going anywhere in the world now,” while a student in Isfara stated that taking part in TSCP “has certainly changed my life for the better.”

I live not far from the center of the city. I never go home after classes now, but come here [to the ILC]. I can't imagine what it would be like without it.

- A Female Project Group Member

Young women in Tajikistan face many cultural restrictions, and they are less likely to complete school than young men, especially in rural areas and small towns. Further, there has been a great exodus of women from the public sphere, especially in the public sector, since the end of the Soviet Union. During the evaluation site visits, the evaluator was told by many different observers that girls frequently drop out of school after 9th grade and that TSCP has been a great stimulus for the girls involved to continue their studies. Teachers spoke of how it gave a “voice” to girls in strengthening their self-confidence, and, in more than one case, female students testified that the ILC had given them a purpose in life and a sense that they could achieve something.

Commenting on the “International Women’s Day Photo Project” carried out in the spring of 2004, TSCP staff noted that this topic not only “encouraged girls’ participation in our project and our center, but also encouraged them to go out into their families and communities as experts using technology. The subject matter provided a ‘safe’ means for them to participate in everyday life, and also to observe and examine it in a different way. The project allowed the girls a new insight into the roles women play in their communities, and into their own lives.”³¹

Very notable to any visitor of the ILCs is the high percentage of young women who are participants (and from all appearances, enthusiastic participants) in the project groups and present at the ILCs. At nearly all the sites visited, girls were in the majority in the make-up of the project group. They led discussions, worked together in groups, and took leadership roles in using software to design presentations and websites. The technical skills that they have gained with TSCP, as well as the research experience and social skills they now have, will serve these young women well as they grow older and move into the labor market.

Finally, combined with these skills and the self-confidence gained by both girls and boys, is the emphasis on learning English. Many students - who may speak Tajik or Uzbek at home - reported that their work on projects and at the ILC has helped them to strengthen their Russian and improve their knowledge of English.

³¹ “Tajikistan Connectivity Q1 2004 Report,” submitted to ECA by RI-SOL.

A very important thing for us is that [coming to the ILC] helps us to strive to speak and write English and share opinions and views with native speakers. We make friends with others via email and we even exchange photos with them.

- A TSCP Student

Key in this growing focus on English is enabling the relationship with the U.S. school. By virtue of the need to be able to prepare websites and presentations for their partner school, the Tajik youth communicate in English. One real challenge to the free-flowing contact between partner schools has been the limited English capacity of the Tajikistani students, many of whom are studying in small cities at schools which are not necessarily academically strong. Nevertheless, many Tajikistani students and teachers have taken on English study with dedication. For instance, students in one rural school stated that they attended English classes at the ILC every Saturday morning, with materials provided by a donation from the United States. Many others talked about how they visited English language websites and looked for resources to help them improve their skills in the language. Students also expand their use of English simply by surfing the Internet, attempting to understand American and other English language websites and to interact via email and in chat rooms with English speakers. These activities and actions further support the students' ability to communicate with their American counterparts.

The OSE in Isfara, with the support of a RI-SOL ESL specialist, established a country-wide, web-based "English Club" (<http://www.english.tj/>) to foster and support the teaching of English at ILCs. With the encouragement of local ILC staff and the lead teachers, English teachers have reportedly begun to understand the benefits of using the website both for themselves and for the classroom. The OSE in Isfara invited some 16 English teachers to a training session at the ILC, including how to find English resources online and how to use email, which has created a community of interest among the teachers. In several ILCs, lead teachers have invited their colleagues from other schools and educational departments to introduce them to the English Club website and other useful English language resources available on the Internet. When TSCP asked ILCs to identify their most used websites, many of the favorites were for English language learning.

5. Civil Society and Civic Education

TSCP has partnered with IFES in Tajikistan to buttress the Program's focus on civil society. As mentioned previously, IFES's first major contribution was the development of a textbook and teacher's guide, *Citizenship, Governance & Participation: Your Role in Civil Society of the XXI Century*. This textbook has been used in conjunction with several of the PBL topics during the first two years of project activities, including "My Community" and "Human Rights." While primarily oriented to the Tajikistan side of the project, the textbook and guide were made available to the U.S. teachers as well.

IFES was also charged, in its agreement with TSCP, with developing a Student Action Committee (SAC, currently referred to as Youth Leadership Clubs) in each of the schools affiliated with the Program. SACs are a form of student government, which is a new concept for most Tajik students. TSCP has noted that establishing a student government, working with school officials and local government and community leaders, and attempting to plan and carry

out events and projects with very restricted funds and resources is a significant test of students' commitment and skills. However, most students have been enthusiastic about the opportunity. This component of IFES's activities got off to a slow start due to staff turnover and other diversions within IFES-Tajikistan. RI-SOL, concerned about the lack of progress, restructured its agreement with IFES for its last six months to improve the work on SACs, and by late 2004 IFES was working actively, with a full-time advisor and a half-time assistant, to support the creation of the committees. IFES led seminars and trainings at TSCP schools around the country. For example, in October 2004, a joint, three-day seminar was held for several schools in the Sugd region of northern Tajikistan. One student who participated from Isfara had the following comment.

I participate in the SAC, which was established at my school recently. We have 24 members, with a President, and a teacher who acts as sponsor. We will have different programs carried out by committees. IFES had a seminar here, with lots of interesting activities, which lasted for three days. They held it over the holidays. In the future, this will develop to be more active.

-- Student from Isfara, Tajikistan

TSCP online fora have helped to reinforce the focus on civil society and democracy in the project. For example, in October 2004, a forum featured Joe Chamberlain, the political officer for the U.S. Embassy in Dushanbe, who took questions on the upcoming Presidential elections in the United States. During the one-hour session, students had a chance to ask Mr. Chamberlain about how elections were carried out, who was eligible to vote, and how the U.S. political parties worked.

A training series on human rights and an associated forum provide another example of TSCP's work in fostering concepts of democracy and a strong civil society. As mentioned above, teachers used a chapter on Human Rights from the IFES textbook to discuss the topics, and then led the students in a series of debates on related topics. The students formed teams for the debates, and they posted their thoughts on an online forum. Students from Chkalovsk wrote: "We have familiarized ourselves with the UN Convention on Human Rights and we argue much, understanding that our state is not ideal. On the 23rd of March all of us visited a seminar devoted to Human Rights, where we learned about not only the rights of adults, but also of children, since birth. For the first time we are seriously dealing with this topic, for the first time we together discussed urgent problems and learned to respect the rights of others, therefore with big interest we prepare for debate between schools."

Across the formal training, fora, and community projects, the civil society focus is a central component of TSCP programming. Beyond discussions and learning opportunities, the focus translates into real community activities and projects, carried out by TSCP project groups and, especially, by the SACs. An emphasis on volunteerism exists throughout the Program. One of the principal vehicles that TSCP has used to emphasize volunteerism both in 2005 and 2006 is GYSD.

Global Youth Service Day is the largest annual celebration of young volunteers, where millions of young people in countries everywhere highlight and carry out thousands of community improvement projects. GYSD offers a way for local, national, and international organizations to:

- BUILD the capacity of an international network of organizations that promotes youth participation, service, and learning;
- EDUCATE the public, the media, and policy makers about the year-round contributions of young people as community leaders around the world;
- MOBILIZE youth and adults to meet the needs of their communities through volunteering; and
- LEARN and share effective practices in youth service, youth voice, and civic engagement in the world today.

- GYSD website, <http://www.gysd.net>

All schools visited during the evaluation had participated, in some way, in GYSD in April 2005, when the theme was “Improve Yourself -- Improve Your Community,” and students at each ILC were anxious to describe their activities.

- *On Global Youth Service Day the students raised funds to buy kitchen items for lonesome and elderly people, and to buy a tape recorder and arrange a concert for disabled children. Also, they visited a geriatric home on this day. Moreover, they planted trees and flowers in the school for which they brought saplings from their home. In order to organize people, the students led some seminars that were broadcast at the regional TV channel. It pushed other students to emulate them and so the number of volunteers increased.*

-- Student in Shakrinav

- *We worked on Global Youth Day, and we collected volunteers together and held a seminar with volunteers. Then we went out and worked cleaning up our Victory Park...This was the 60th anniversary of the victory in the Great Patriotic War. We cleaned up everything, and the adults were so happy.*

-- Student in Sarband

- *We visited veterans of the Great Patriotic War.*

-- Student in Kanibadam

- *On International Youth Service Day, we helped old people at the old people's home, cleaned the school area, limed walls, removed garbage and planted trees.*

-- Student in Vaksh

- *We also recently took part in the Global Youth Service Day project. We had a seminar for students, then for three days we worked to improve the community; we made a plan for three days of volunteer work. On the first day, we cleaned the park. This was their own idea; they made up the schedule... The second day, we went to an Orphanage in Chusal. The students took books and toys. This is 80 kilometers from Isfara in a city that is now like a dead city, with only a small population left. We had discussions with the orphans, and played games. Our students from the Project Group talked about the city, about the influence of the Internet, and collected things to give to the kids. There are 30 children of all ages. Then, on the third day, which was last Sunday, we went to the School for the Blind ... And then we finished up with an online forum with students from Uzbekistan.*

-- Student in Isfara

Project-group students have also looked for ways to volunteer at the ILCs, especially in sharing the computer and Internet skills that they have gained with others. As one student said, “We have different, informative activities, relating to such topics as being volunteers or learning about our community. Once we gained Internet and computer skills, I began teaching them to others. If the Program continues, there are many friends who still can’t work on the Internet, and I would like to conduct training for them so that they can learn. It will help them to develop knowledge of the world.”

One ILC in Dushanbe, in coordination with ORA International (a private, German-based NGO that works with disabled children and youth), has taken on a special ongoing project: a weekly session where handicapped children are brought to the Center and introduced to computers. Some children in wheelchairs have to be carried up the stairs to the computer room because the Center has no elevator.

ORA International comes in on Saturdays, bringing disabled people to this center. We have helped them with computers, taught the basics of computers. Even so, some still can't use them. Some students from other universities come to learn about the ILC then as well. The disabled come regularly, every Saturday at a regular time. The community here is very active; students gather from around the city every Saturday from 10 a.m. to 3 p.m. Those in wheelchairs are carried up. Many disabled children are not generally in school; they are not integrated into society. While many cannot write on the computer, they create letters and pictures through a graphics software program called "Paint." The older students learn Excel and Word.

-- Students in Dushanbe

This focus on volunteerism with TSCP clearly sensitizes students to the idea of the importance of building a civil society. They reflect on examples of contributions made by adults. In a recent forum on volunteerism, students were invited to respond to the following question: “Can you give examples of famous volunteers from your country/world?” Students from Gulyakandoz wrote the following observation.

We think there are a lot of volunteers around us helping vulnerable people, but we just pay no attention to them as they don't like to tell about their deeds. We'd like to tell about our vice director. She created project "Care" and involved active students of our school in the project activities. They have their own structure and a strict plan of activities. Every month they help vulnerable and poor children of our school, poor people of our town. They collect secondhand clothes and money to buy school needs. We informed the vice director about our Service Community activity and she again supported us and explained to students the goals of the activity. Due to her efforts, the entire school, from primary till upper classes, took part in gathering money and clothes. They'd like to provide the patients of the Invalids' House or Orphans' Home.

-- Students in Gulyakandoz

6. Survey of Community Users

Community members who use the ILCs in Tajikistan were asked to fill out an online survey regarding their use of the centers and their experiences with the Program. Data was collected on 145 community users.³² On average, community members have been frequenting the center for 8.7 months and generally spend a little over 4 hours a week there (4.35 hours). On average, they are 25 years old (24.43) and 66 percent of them are men. About half of them (49.6%) did have access to a computer prior to using the ILC center, and most of them (87.2%) live in either a small town or rural area. In terms of educational levels, 44.1 percent have a secondary education, 16.6 percent have a technical degree, 29.4 percent have a University degree (1st degree) and 9 percent have a Master's or PhD.

Information about the ILC tends to reach the community via three main channels: the ILC staff, through networks in the community itself (neighbor to neighbor), and from the school (students and teachers). Table 5.2 shows how community members first learned about the ILC.

TABLE 5.2 How Did You First Learn about the ILC?	
	(%)
Newspaper/advertisement/poster	4.9
I saw it as I walked by	3.5
ILC Staff	23.6
My child attends school where the ILC is located	5.6
From a student	11.8
From a teacher	12.5
From a co-worker	4.2
From a neighbor, friend or relative	34.0
<i>Sample Size</i>	<i>144</i>

Clearly, the role of the TSCP ILC staff is critical in these efforts. Approximately one-quarter (23.5%) of the community users learned about the ILC directly from a center staff member. In addition, the role of social networks in the community itself is evident. Thirty-four percent of those using the ILC learned about it from a neighbor, friend, or relative.

Male and female respondents reported that they learned about the ILC from different sources, as did younger and older people. While about one-quarter of men and women learned about the center from the ILC staff (23% of men and 25% of the women surveyed), more men than women learned about the center either from the newspaper, neighbors/relatives, or just walking by. Women, on the other hand, tended to learn about the ILC center from students or teachers (35.5% of the women, compared to only 17.9% of the men). Many of those over the age of 35 heard about the center because a child attends the school (38.9%); whereas, younger community members heard about the center in many different ways.

³² The final number of 145 is a result of filtering out many cases that represented either anomalies in the data or an age range well below the target age range for the designated population. Two hundred sixty-one individuals went online and completed the community survey in Tajikistan. However, for purposes of this analysis, only those 18 years or older (i.e., age at which students finish the 11th grade) were selected for analysis. In addition, a small number of individuals (mostly older community members) stated that they spent 40 hours or more in the ILC. Since the centers are only open 1 or 2 hours a day for community members and/or students from other schools, these responses simply did not make sense and these cases were removed from the analysis.

So what have the community users learned at these centers? Results of community user responses to questions are shown in Table 5.3.

TABLE 5.3 Skills Gained by Community Members	
Skills Gained	(%)
Increase in Computer Skills	85.6
Large Impact on Improving English Language Skills	62.1
Computer Applications Learned	(%)
Internet Research	69.0
E-mail	88.9
Word Processing	73.8
Online Discussion Fora	40.7
PowerPoint	44.8

A very large majority of the community members (85.6%) report that their computer skills have improved since they began using the ILC, and 62 percent of them also report that the ILC has had a large impact on improving their English language skills. Like the participants of the Program, community members gain valuable skills by frequenting the ILC and interacting with the ILC staff. The three main computer applications that community members report learning are: Internet research (69%), e-mail (88.9%), and word processing (73.8%). To a lesser extent, community members report learning about online discussion fora and PowerPoint.

From the responses of the community members, it is apparent that the ILCs in Tajikistan have enhanced civic engagement in communities. Eighty-three percent of the community members surveyed believe that the ILCs have contributed to greater participation in local government, and 52 percent of them report that the ILC has either hosted or facilitated community meetings to discuss local issues. Finally, 57 percent of the community members report that, as a result of their experience in the Program, they have increased their volunteer activities in the community. The ILCs in Tajikistan are important tools in realizing the Program goals of civic education and engagement by serving the communities and their members as community centers as well as computer centers.

TABLE 5.4 Use of ILC for Civic Engagement and Community Member Outreach Activities	
Civic Engagement	(%)
ILC has hosted/facilitated community meetings to discuss local issues	52.1
ILC has contributed to greater participation in local government	83.9
Increased volunteer activities/community service	57.1
Community Outreach	(%)
Shared Program experience by participating in media interviews	44.4
Shared Program experience by giving presentations to community, neighborhood, school, or university	43.6
Shared Program experience by writing newspaper articles	21.4

In terms of outreach and dissemination of TSCP information, community members are actively reaching out to share their experiences with others in the community. Just like the Program participants, community members are a vital source of information for the TSCP in the local

community. Forty-four percent of the community users surveyed report that they have given interviews to the media about their experience in the Program and nearly 44 percent (43.6%) of them have made presentations about their experiences in the Program to the community, their neighborhood, or school/university. Finally, a sizeable proportion of these community users have written newspaper articles about TSCP (21.4%).

Finally, a sizeable percentage of these respondents indicate that they do have knowledge of the United States and they hold favorable views of the American people. Responses are shown in Table 5.5.

TABLE 5.5	
Knowledge of U.S. and Impact of Program on Community Users	
Knowledge of United States and Views of the American People	(%)
Advanced or Beyond Basic Knowledge of U.S. Values and Culture	45.3
Advanced or Beyond Basic Knowledge of Daily Life in U.S.	58.6
Strongly or Generally Favorable View of the American People	76.1
Impact of Program on Knowledge of United States	(%)
Moderate to Substantial Change in Knowledge of U.S. Values and Culture	55.8
Moderate to Substantial Change in Knowledge of Daily Life in U.S.	49.3

Approximately 76 percent of the community users surveyed report strongly favorable or generally favorable views of the American people. While a smaller fraction of community members feel they have a good grasp in terms of U.S. values, culture and daily life, a sizeable percentage do rate their knowledge as beyond basic or advanced (45.3% for U.S. values and culture; 58.6% for daily life in the United States). Moreover, many of the community members in this survey feel that their experience with the ILC has changed, either moderately or substantially, their knowledge and understanding of U.S. values and culture (55.8%) and daily life in the United States (49.3%). *Clearly, the TSCP is achieving one of its main goals of enhancing mutual understanding by providing community members access to the ILCs.*

7. Partnerships with U.S. Schools and Impacts on U.S. Teachers and Students

a. Nature of the Partnerships

The TSCP has established direct partnership relationships between U.S. schools and the now 26 schools in Tajikistan that are participating in the Program. The number of U.S. schools taking part has ranged between 10 and 13 high schools, and, typically, a U.S. school is matched with two schools in Tajikistan. Each school team has committed to a year-long collaboration on interactive projects that encourage dialogue across borders and cultures, which take the form of exchanges of activity products through websites and via electronic mail (such as the exchange of PowerPoint presentations on the common topic of study). There is one project per month, determined by TSCP headquarters in Los Angeles.

In September 2005, the evaluation team visited two U.S. schools in Denver, Colorado that had partnerships with schools in Tajikistan. At Littleton High School, where the Program was beginning its second year, the lead teacher said that the students had not had any direct interaction with students in Tajikistan in the first year, but that in the current year (the 2005-06

school year), they would have a school-to-school partner. At the Colorado Academy, students themselves noted that they had engaged in communications through the fora.

b. Activities

Both Colorado schools' partnerships shared projects through a central website. Both Colorado school teams worked on presentations which they shared through the website, which one Academy student called "well-organized and maintained." Creating the projects involved extensive research, according to the students, which was challenging since information about Tajikistan was not as readily available as for other countries. However, they also noted that they improved their research skills and found relevant sites in English for information on Tajik culture. At the Colorado Academy, students and the teacher felt that these projects gave them a window on Tajik culture and customs and also on the Soviet era. One project had students share oral histories they collected from World War II and Soviet veterans. In another project, the students shared what a "typical day" would be like in each school.

The students in both Colorado schools also sought out and examined projects (generally PowerPoint presentations) created by participating Tajik schools. In each school, students noted the difficulty the Tajik students had with English grammar, and that despite that problem, the technical expertise in the presentations was quite advanced. One student at Littleton High School said that this compelled her to work harder on her own team's presentation, so that it would make use of the various attributes of PowerPoint. She said she wanted to "stretch her own abilities" to match the nature of the technology and pictures used in the Tajik presentations.

Students worked on projects daily, in class, in teams with lab time, language concerns, and collaboration, "like in the real world," according to one student. The teacher added that seventy students in three geography classes were so involved in the project that they stayed late or made arrangements to get access to the folders outside of class so they could continue to work on the project in their free time. The close fit of the Program with his 9th grade geography curriculum made the project "a great success."

The Colorado Academy teacher who participated in a teacher exchange was very enthusiastic and had offered a number of presentations to the entire school, including a fashion show, a Tajik-inspired meal, video of Tajik dancing, and a travelogue. In addition, she sent frequent communications home during the trip that were shared with the students, and involved her substitute teacher in lesson planning so that the projects could continue with the teacher's input. In addition, an entrepreneur from the community shared her experiences with the class on a development project in Tajikistan.

This teacher also established a strong partner teacher relationship during the exchange. One U.S. teacher made the following statement.

Getting to know the people behind the names makes my involvement more urgent. I don't want to disappoint my partner teacher, so I try harder to organize my lessons to match our joint lessons.

-- U.S. Teacher in TSCP

Another U.S. teacher said that the exchange was important because it: "...created permanent changes in my physical and mental patterns that have helped me assist my students in developing a better appreciation for what we have in the US that many other people lack."

In participating in the fora, Colorado Academy students said that the Tajik students' English was "good enough" to communicate, and that the Tajik students were very active on the fora. The Colorado students said their own participation was not very active, though they did participate in the political forum.

Teachers responding to open-ended survey questions indicated that they joined the Program to expose their students to international topics and to interactions with people in other cultures. Moreover, two teachers stated that they hoped the project would enhance their own professional growth and teaching techniques.

One respondent praised the active participatory aspects of the Program, from the workshop this person attended to the teacher exchange. The respondent called these aspects "more energizing" than simply studying a topic.

c. Impact on U.S. Students and Teachers

The Colorado Academy teacher felt that the greatest impact for students was in their new "global awareness." She remained in active contact with her partner teacher in Tajikistan, and had also signed up to be paired with an Afghan teacher in the new school year. The school celebrated Eid and the teacher's contributions included a multimedia presentation and food from Tajikistan.

The teacher at Littleton noted that their students strengthened their PowerPoint abilities to react to the excellent presentations offered by the Tajik students. A student at Littleton credited the Program with teaching her how to research effectively on the Internet.

Both teachers reported that their schools had offered active international studies and events prior to the RI-SOL Program, while also praising what the Program brought to their students' experiences.

F. Summary Observations

TSCP has, in a relatively short time, accomplished a great deal towards meeting project goals. The following conclusions can be drawn, based on the evaluation visit and project reports.

1. Building Mutual Understanding and Fostering Cross-cultural Learning

TSCP has been very successful in mobilizing young people to participate enthusiastically in a Program that unlocks their access to the world, in spite of living in a relatively isolated, small country emerging from the breakup of the Soviet Union. TSCP opens a broad vista of world diversity to young people who previously had very few means to understand and experience anything beyond the boundaries of their communities.

The Program has also succeeded, against odds and obstacles, to establish ongoing ties between Tajikistani and U.S. schools. While the Tajikistani students are probably more interested and involved in building ties with the U.S. than the reverse, TSCP has nevertheless, through its combined efforts with collaborative projects, online fora, and teacher exchanges, maintained and fostered a growing mutual understanding between young people in the two nations. The joint projects with U.S. schools have been especially engaging for the students. Students in Tajikistan are enthusiastic about any contacts with U.S. students. They appear almost unanimously to be positive about these experiences, seem to treasure direct contacts with U.S. youth via email, and generally expressed considerable interest in learning more about the United States.

TSCP has also been successful in fostering cross-cultural learning across the region, in developing ongoing ties with students in Uzbekistan through fora, and in working with other RI-SOL projects in Afghanistan, Bangladesh, and the West Bank. Joint learning efforts with participants in these other Programs contribute to the “opening up” of their world view that so many of the Tajikistan students report.

In addition, the TSCP ILCs have had an impact on community members. Half or more of the community members report that their experience with the ILC has changed, either moderately or substantially, their knowledge and understanding of U.S. values and culture, and of daily life in the United States.

2. Catalyzing and Assisting Educational Reforms

Coming out of an educational system that emphasized memorization and rote learning, even at higher levels of study, the PBL projects present a much more student-centered, interactive learning modality, consistent with classroom and teacher training approaches that the United States has been actively introducing in its programs around the world in the past two decades.

The project-based learning approach introduces a set of important skills that are, for Tajikistan students, a dramatic break from past pedagogical practices. Students are learning to brainstorm, develop hypotheses and test them out, work in teams, and to devise new ways to gather information and to assemble it. Many of the projects require analytical thinking, synthesis of information from multiple sources, and the need to understand new ideas and new cultural expressions. The fora complement these projects by introducing serious topics themselves, leading the students to reflect on some of the real problems and quandaries facing the world – life with AIDS, identifying issues in elections, domestic violence and women’s roles, and “problems in teenagers’ lives.” These contribute to a changed understanding of learning and what can happen in the classroom.

Teachers also attested to the impact of TSCP, both on their concept of how they teach and on the resources available to them for teaching. Teachers mentioned the ability to find curriculum-relevant supplements for their courses, enriching the materials used in the classroom. Others talked about learning from teachers in other countries. School directors interviewed during the evaluation also showed support for the Center and for the activities carried out there.

3. Impact on Young Women

The Program appears to be especially beneficial for girls and young women. In most of the schools visited, young women predominate in the project groups and are well represented among ILC users. The activities surrounding the project provide a safe and protected environment for young women, one in which they can be out of the home participating in activities supported by their parents. Furthermore, teachers reported that young women who participated in the project were more self-confident, and this was borne out by the evaluation team's observations. Many young women were also quick to test their growing skills in English with visitors.

While it is difficult to assess the conclusion quantitatively, multiple observers reported that the Program acted as a motivation for young women to remain in school. Teachers and school directors report that it is not uncommon, especially in small towns and rural areas, for girls to leave school after ninth grade. The interest and excitement engendered by the project reportedly have kept young women in school to completion, at the end of eleventh grade.

Young women are learning about technology and mastering significant computer skills at the ILCs, skills that will increasingly be in demand in the Tajikistan labor market. This situates them very well for the future, when information management skills will be one building block for a decent job. While the status of young women may have declined in general since the end of the Soviet Union, the project is providing many young women in small communities, as well as in larger towns, with a background that will contribute to their future careers and their ability to contribute financially to their families.

4. Development of Skills and Knowledge

TSCP has provided a means for many young people to gain the basic computer and Internet skills that all agree are fundamental for the 21st century workplace. Some students have become very proficient in a wide range of software applications.

Access to the Internet is only a subsidiary tool that contributes to working towards Program goals. The real key to their achievement is the organized monthly collaborative learning programs that TSCP provides to the ILCs and the project groups throughout the country. These emphasize online research, writing, communication skills, teamwork, and critical thinking. The online fora that are organized around these and other civic education topics reinforce the value of the projects.

In addition, community members have also gained valuable skills by using the ILCs and interacting with the ILC staff. Most of the community members surveyed indicate that their computer skills have increased since they began frequenting the centers and many of them report that the center has had a large impact on improving their English language skills as well.

5. Civil Society, Community-building, and Volunteerism

The project has placed a special emphasis on civil society, and TSCP has worked with IFES to develop student-based leadership roles and Student Action Committees in each school that mobilize their fellow students to take on projects. Certain project activities, such as a focus on human rights, have explicitly worked to reinforce ideas of civic responsibility and pride.

The ILCs draw parents in to support the activities of their children in a variety of ways. The parents themselves and other community users at large also gain the opportunity to use the computers and the Internet. Local government officials, journalists, university students, and citizens at large reported that this is especially important for fostering communication between community members and absent relatives and friends, who may be traveling as migrant workers in neighboring countries. The centers thus play an important role in supporting the network of social relations in and beyond the community.

The TSCP online fora reinforce the project's focus on civic education. There is also an emphasis on volunteerism in the Program; the 2005 and 2006 Global Youth Service Day has been a major vehicle for mobilizing student interest and activity, including the following activities.

- Students have worked on a project to raise funds for the elderly.
- Students have cleaned community parks.
- Students visited veterans on national patriotic holidays, to recognize their contribution to society.
- Students visited an orphanage, interacted and talked with the resident children, and brought them books and toys.
- Students in several schools have worked with disabled children to introduce them to computers.
- Students volunteer regularly to teach community members how to use computers.

The use of the TSCP ILC by members of the community has enhanced civic engagement in these communities. The centers have been used to host or facilitate meetings to discuss local issues and community members surveyed report that their own volunteer activities and community service have increased.

6. Support for English Language Instruction

Internet use has also facilitated English language skills and awakened great interest in learning English on the part of the students. Young people in small Tajikistani communities are mastering English, and, through the efforts of a teacher in Isfara, English language learning is being taken online through the creation of a TSCP-wide English Club website.

7. Strengths of TSCP's Implementation

TSCP has adopted an effective implementation model, using a grass-roots based approach of developing capacity and skills in local communities around the ILCs. It has adapted available and inexpensive communications technologies too, so that the central office can guide the dispersed team and build a strong sense of mission and purpose across the country. They have also reached out beyond the project to incorporate as many other stakeholders as possible. RI-SOL has invited local NGOs to participate via offering training and seminars, has worked closely with IFES to expand the offerings in civic education, and has worked with IREX in Uzbekistan to extend contacts across the border. Further, they have successfully combined the TSCP activities with GCEP projects they implement in Afghanistan, Bangladesh, and the West Bank. Finally, RI-SOL has emphasized sustainability from the earliest days of the project, and has successfully worked to create a new NGO that will link participating ILCs after RI-SOL's activities end.

6 THE SCHOOL CONNECTIVITY PROGRAM IN SOUTHEASTERN EUROPE

CONFLICT RESOLUTION AND RECONCILIATION

Chapter Six

A. Introduction

The SCP in Southeastern Europe (SEE) was established in February of 2002 to support the Stability and Growth Pact in this region. In addition to its Connectivity Program objectives highlighted below, this SCP was designed to reinforce conflict resolution and reconciliation mechanisms, as well as promote mutual understanding.

This chapter provides a brief summary of key findings and an overview of the SCP in SEE, reviewing content and curriculum, teacher training and specific Program activities. It includes an assessment of its effectiveness in reaching specific State Department and Program outcomes. The chapter is based on **qualitative data**, including reviews of Program documents and websites, interviews with key informants, and findings from a nine-day site visit to Bosnia and Herzegovina (BiH) in May 2005.

B. Key Findings

1) *Mutual Understanding*

- Students in Bosnia and Herzegovina stressed that making virtual connections with others outside their towns, countries, and regions was particularly meaningful to them.
- As a result of the SCP Program activities, students in Bosnia and Herzegovina expressed sentiments and attitudes that demonstrated more openness towards others, to the world, and a new desire for increased knowledge and learning.
- SCP/BiH effectively linked the goal of mutual understanding to that of conflict resolution, inter-ethnic dialogue, and reconciliation. The symbiotic relationship between these two goals was reflected in Program structure and content, and certainly worked to the mutual reinforcement of both.

2) *Educational Reform*

- Students and teachers alike indicated that SCP/BiH has been effective in enhancing a teacher's ability to adopt new teaching methodologies and a catalyst and impetus for reform.
- Teachers in Bosnia and Herzegovina have begun to integrate new information technologies and computers into several subjects, providing them with more flexibility in their teaching methods.

- The collaborative nature of SCP online activities, in particular, has exposed students and teachers alike to new, more cooperative ways of doing things, something beneficial and positive for learners.
- In response to changes in both teaching methods and the presentation of complex subjects, the student learning process has also undergone a transformation.
- CRS staff members see a direct correlation between the teacher exchanges and the teachers' ability to adopt and adapt new teaching methodologies in the classroom. As part of the reciprocal exchange, teachers from the SEE region were able to witness different methodologies in action and obtain hands-on experience.

3) Conflict Resolution

- SCP relied on the conflict resolution philosophy that knowledge of the “other” as a human being, rather than as a political opponent from a different ethnic, national or religious background, is a key to conflict resolution and reconciliation.
- SCP core online activities have exposed students to other students in their own regions, or in some cases, in their own countries.
- As a result of online interactions, students in Bosnia and Herzegovina stress the commonalities they have with one another, as well as others from neighboring countries of different ethnic backgrounds (e.g., Kosovo, Albania).
- One of the unique features of the SCP in SEE was to build interpersonal communication skills among participating teachers as a means of facilitating dialogue.
- Teachers recommended that a Program like the SCP use its online activities and projects as a means of introducing the students to each other, and then engaging them in cooperative projects that require some interaction “on the ground,” so to speak. This coaxes students into inter-ethnic dialogue.
- Creating and portraying positive sentiments about students' own towns was an important component of the healing process and reconciliation in Bosnia and Herzegovina.

4) Skills Development

- Teachers in Bosnia and Herzegovina commented that students have gained a diverse skill set from this Program and this has had a positive effect on their coursework.
- Teachers made connections between student involvement in the online SCP activities, improved skill levels, and greater enthusiasm for their work.
- SCP fora have also provided a venue for students to learn how to act as change agents, to identify needs in the community, and collectively to discuss practical solutions to problems.

5) Strength in Implementation

- The curriculum was organized as connected activities or ‘Units.’ This helped the students use IT technology and construct web-based materials, as well as discuss themes or topics. It provided the students with a clear structure and a sense of progression through the Program activities.
- Unit 4: *Building a Collaborative Community* was structured in such a way that it required interaction between students and local community members. This contributed to a greater awareness, on the part of students, of their local community as they conducted research and interviewed local leaders.

- Over a three year period, the number of postings on the CRS School Connectivity Website steadily increased, both in the SEE region and by U.S. partner schools.

C. Southeast Europe School Connectivity Program Description

Catholic Relief Services (CRS) coordinated and managed the Program since its inception, in 2002. CRS implemented the project directly in Albania, Bosnia and Herzegovina, Bulgaria, Kosovo, Macedonia, Montenegro and the United States. CRS' partner organizations implement the project in Croatia, Romania and Serbia. The Program established connections among 77 secondary schools in the region and 15 counterpart schools in the United States. The breakdown of participants across the countries is shown in Table 6.1.

TABLE 6.1 School Connectivity Participants in Southeast Europe			
Country	# of Schools	Est. # of Students	Est. # of Teachers
Albania	7	105	14
Bosnia *	9	175	17
Bulgaria	10	154	18
Croatia	8	179	21
Kosovo	8	128	16
Macedonia	9	192	84
Montenegro	8	128	16
Romania	8	229	54
Serbia	10	208	34
Regional Total	77	1,498	274
United States	15	488	30
Total	92	1,986	304

As of April 2006 (www.schoolconnectivity.net, April 6, 2006).
 * A tenth school, a madrassa, was brought into the Program late as a result of a visit from the U.S. Ambassador in Bosnia. The school's participation was rather limited (see section on Design of Curriculum under Constraints for details).

CRS grouped the SCP schools in 23 clusters, combining schools from different countries to encourage communication and joint projects among them. Since there were only 15 U.S. schools, several of the clusters did not have a U.S. partner school. The SCP schools entered the Program in two waves: the first in January 2003, and the second in September 2003.

1. Program Content

According to CRS staff and the SEE SCP website, the goals of the Program are the following.

1. To increase inter-ethnic dialogue among schools in SEE and the United States via the use of Internet technology.
 - To give students critical and analytical skills so that they can determine, for themselves, whether the media and society portray other groups with some bias/incorrectly.
2. To develop mutual understanding more fully between American and Southeast European schools, through multi-partite linkages.
3. To facilitate joint learning and project work through communication.

4. To generate personal and institutional ties among students, educators, and schools across borders, through communication technologies.
5. To provide teachers with the tools and support network necessary to continue developing courses of study that incorporate web-based learning in other education subjects and situations.

To accomplish these goals, CRS structured the SCP in SEE into five primary activities: teacher training; curriculum; school connectivity website; teacher exchanges; and conferences.

2. Teacher Training

The following areas were identified as the focus of teacher training:

- Managing online collaborations;
- Developing IT skills for learning and teaching;
- Communication and conflict resolution; and
- Project design and management.

CRS Master Trainers worked with the teachers to help them improve and strengthen their computer skills, and to understand and assimilate the curriculum content developed for the SEE Program. In particular, CRS offered professional development workshops to provide an understanding of the integration of online, collaborative projects in the classroom, interpersonal communications, team building, tolerance building and understanding, and group work. IT management and support was provided to teachers in the form of troubleshooting and maintenance of computers/network, setting up guidelines and scheduling of computer labs, as well as the safety and security of the computers/computer labs.

At the beginning of each year, teachers gathered for an orientation on new materials. CRS felt that this was important for facilitating group work and joint projects throughout the year. The face-to-face contact generated more interest in the online activities and enabled teachers to establish the foundation for joint activities. Teachers also had an opportunity to perform the tasks/activities that would be the focus of student work. According to a teacher from Dobož (Bosnia and Herzegovina), the orientation helped the teachers learn how to conduct project activities and prepare for teaching these activities to the students.

One of the unique features of the SCP in SEE was the interpersonal communication skills training provided to all of the participating teachers. This set a particular tone which the teachers used during their subsequent interactions with students. In their interpersonal communication training, the teachers were also explicitly instructed to discourage their students from discussing sensitive topics that might create mistrust and misunderstanding. This is consistent with the school of thought in conflict resolution and prevention that argues that individuals who appreciate each other as people will be less likely to let political differences cause major conflicts. Indeed, the potential for conflict arises when individuals view others as political actors.³³

³³ David Smock. "Teaching about the Religious Other," U.S. Institute of Peace Special Report no. 143 (July, 2005). <http://www.usip.org/pubs/specialreports/sr143.html> (accessed 6/14/2006).

a. Curriculum

Initially, the University of Graz in Austria designed a curriculum for the SEE Program. CRS staff tested it and determined it was not suitable for the Program as set out in their grant from the State Department. Upon making that determination, CRS staff developed a new curriculum to meet the goals of the Program. The new curriculum explicitly avoided politics and discussions of the war.

CRS designed the curriculum as connected activity ‘units.’ These would help the students use information and IT technology, and construct web-based materials. Each of the four units was organized around a basic question or theme:

1. Exploring Online Discussion for Collaboration: “Who Am I,”
2. Our Town – A Short Collaborative Project: “Who Are We,”
3. Cultural Tour Guides: “Who Are We, Continued,” and
4. Building a Collaborative Community: “What Can We Do Together.”

Unit 1: Exploring Online Discussion for Collaboration - “Who Am I”

In Unit 1, the students learned to use the School Connectivity website and fora. It provided both the teachers and students with a foundation for, and preparatory guidance on, using the various information and communication technologies (ICT) tools available to them through the Program. The objectives of this unit were:

- To familiarize students and teachers with the SCP Website Cluster Forum;
- To develop and practice good online discussion behaviors;
- To explore and understand netiquette and the issues surrounding online discussion; and
- To develop social skills important for collaboration.

In this unit, students created web pages that highlighted their individual identity, by writing about their interests, families, hobbies, and hopes for the future. All of the web pages had to be constructed in English, so this exercise allowed for self-expression in a foreign language. Many of the personal websites created in Unit 1 were never posted to the server for lack of space. Students, however, had to maintain them as documents on their hard drives. For those who were able to post them, their web pages opened up new spaces for discussion in the online fora.

Unit 2: Our Town – A Short Collaborative Project: “Who Are We?”

The objective of Unit 2 was to introduce and complete a simple web page about students’ home towns, in collaboration with other schools in the same cluster. The primary objective of this unit was to discover and create collaboration strategies, rather than focus on the content or design of the web page.

Students were assigned to groups in order to conduct research about the founding of their towns, the history and development of their towns, the local economy, and their culture. The students visited local libraries and museums, government offices, and cultural centers to gather information. They also researched historical figures on the Internet, and many gave presentations on them. Then, they translated their findings into English for the forum. One student in Bosnia and Herzegovina described the experience in the following manner, “We

learned about how our school is organized, too, and our community's cultural traditions – theater, the music school, and the folk ensemble.”

Unit 3: Cultural Tour Guides - “Who Are We, Continued”

In Unit 3, building upon the group work done in Unit 2, the students in each school created a website about their towns and cultures that were shared with the other schools in their clusters. A major objective of this unit was to help students develop the technical skills for website construction and teamwork. The work in Unit 3 supported the Program's International Conference (discussed below), as the students eventually selected to attend were required to give a presentation on their hometowns. In addition, Unit 3 required the students to design an engaging, inquiry-based cultural tour of four countries designated as the ‘Tour Guide Group.’

Unit 4: Building a Collaborative Community - “What Can We Do Together”

Unit 4 was an exercise in citizenship and in empowering students to address community problems they had identified. More specifically, objectives for this unit highlighted collaboration and community awareness and were articulated as follows.

Collaboration

- To build trust among students, teachers, and the community through collaboration.
- To facilitate collaboration between local and international SCP schools both within the region as well as in the United States.
- To collaborate in identifying and developing solution frameworks for a community challenge.

Community Awareness

- To provide a venue for identification and discussion of community-based issues and challenges that have had a direct impact on students.
- To investigate community challenges from a variety of school content areas.
- To facilitate community awareness of the interconnectedness of academic disciplines.

To achieve these objectives, participation in the unit was structured around committees of four students. Each student committee identified and proposed a solution to a challenge in their community. The local committees collaborated online with a group of committees from three other schools. These committees reviewed each other's work and solutions for their respective “community challenges.” In this way, the curriculum was intended to identify and to share community issues that are common across national boundaries, as well as to encourage dialogue concerning a productive local community.

For example, a teacher in Bugojno, BiH, explained that their particular challenge was cleaning up the area of town surrounding the school (i.e., the schoolyard) and providing benches for the students. In order to carry out this project, however, she found that they will probably need a “little financial help.” In Dobo, BiH, the students identified criminal activity in an alley near the school as a problem. The solution they devised for the Unit Four project was to place five or six lights along the alley to deter crime. The students in Kragujevac, Serbia and Montenegro had a similar plan for their school. The fora in this unit provided a venue to tackle identified needs in

the community as creatively as possible, as well as collectively to discuss practical solutions, such as how to fund these new projects.

TABLE 6.2 Forum Discussions for Unit 4		
Activity	Forum Title	Discussion Topics
1 & 2	Identifying and Reflecting on a Community Challenge	What are your community challenges? Share them and discuss them with others.
3	Strategies for Fact-finding and Knowledge	How did you identify your sources for facts and knowledge? What are your fact sources and how do you check if they are accurate?
4	Research Strategies	How is the research done? Which methodologies did you use?
5	Solution Strategy	What are your solutions for stated problems? Where are the challenges?
6	Developing a Community Challenge Website	Plan your community web pages, share with others and provide feedback on other participants' work.
7 & 8	Open House and Next Steps	Share your plans for Open House day, your successes and plans for the future.
As of April 2006 (www.schoolconnectivity.net , April 11, 2006).		

As described in Table 6.2 above, several fora on the CRS School Connectivity website were specifically designed to assist students in the completion of Unit 4. The fora were organized into a structured series of activities that guided the student from beginning to end in a particular module. Unit 4 was an optional activity for the second year of the Program in schools where students elected to continue their involvement with SCP.³⁴ About one-third to one-half of the participating SEE schools used Unit 4. Of the four schools visited in Bosnia and Herzegovina, two had completed Unit 4.

b. School Connectivity Website: Online Activities

The Program's online activities comprised project websites created by student groups; the main SCP website for the region (www.schoolconnectivity.net) hosted approximately 2,000+ active users. According to CRS, the number of online fora tripled in one year. Many of the students also used email or Instant Messenger (IM) to contact others. These more direct and personal means of communication, however, were difficult for CRS to track. Overall, more than 22,000 messages have been posted to the various fora. In addition, students began to create their own fora on Yahoo! Groups in Mostar and on Geocities in Travn timer for Program-related topics not found on the SCP website.³⁵

³⁴ This unit was voluntary due to the additional administrative burden it placed on teachers and principals. In addition, some of the students had graduated from school, and the remaining students had just entered the Program and were working on Unit 1.

³⁵ The students used Yahoo Groups! because of an administrative problem – the students were not given a username and password to the School Connectivity website and so did not have access. It took four months for them to gain access to the portal. In the case of Geocities, the students elected to create their own site because they simply did not like the SCP portal.

SCP Website Fora

The fora on the SCP website were tailored, both in terms of the audience as well as the specific unit content and activities. There was an Introduction forum where students can introduce themselves, a general discussion forum, a teacher discussion forum, weekly discussion fora where students can talk about their personal lives and interests, and fora on each curriculum unit for each of the 23 clusters.

Examining the posts per activity for the *Cluster 1 online fora* provides insights into the topics that generate the most interest and discussion. In general, the broader discussions elicit more responses than the targeted, specialized fora, e.g., Good Practices for Online Discussion versus Collaborative Interviews in Unit 1 (see Table 6.3).

TABLE 6.3 Cluster 1 - Online Fora		
Type of Forum	Description of Discussion	Posts
Teachers Forum		42
Unit 1		
Activity 1	Good Practices for Online Discussion	85
Activity 2	Preventing Flame Wars: Netiquette	21
Activity 3	Collaborative Interviews	11
Unit 2		
Activity 1	Our Town – Introduction and Research	30
Activity 2	Our Town – Assembling the Highlight Webpage	1
Unit 3		
Activity 1	Hopes, Fears and Questions	2
Cultural Tour Guide		
Group 1		2
Group 2		5
Group 3		0
Group 4		0
Technology Specialists		4
Unit 4		
Activity 1,2	Identifying and Reflecting on a Community Challenge	8
Activity 3	Strategies for Fact-Finding and Knowledge	1
Activity 6	Developing a Community Challenge Website	3
* As of April 2006. (www.schoolconnectivity.net , April 12, 2006)		

The students in Bosnia and Herzegovina reported that they most often go into the “General Discussion” forum (3,909 postings) and the “Weekly Discussion Topics” (5,757 postings) to talk about their personal lives and interests. There are 6,437 postings in the “Introduction Folder,” where students can chat about themselves.

Looking at the postings on a yearly basis, we get a clear picture of the momentum of the Program over a three-year period. Overall, *the numbers of postings in SEE countries and the United States have increased during this period.* The first year, the SEE schools were more active in relation to the schools in the United States; however, by the end of the third year, the U.S. schools were posting more than the SEE schools.

TABLE 6.4
Number of Postings on Fora by Country/State
2003-2005

Region	2003	2004	2005
Southeast Europe			
Albania	80	395	1,435
Bosnia and Herzegovina	533	207	412
Bulgaria	358	321	226
Croatia	341	316	509
Kosovo	58	263	124
Macedonia	456	428	212
Montenegro	231	998	323
Romania	149	507	2,831
Serbia	401	394	281
SEE Regional Numbers	2,607	3,829	6,353
United States			
California	171	266	64
Idaho	12	82	
Maryland	171	670	3,290
Montana	123	23	1,030
Ohio	294	136	1,769
New Jersey	40	19	
North Carolina	37	653	284
Utah	25	471	88
Virginia	17	148	324
U.S. Numbers	890	2,468	6,849

* As of April 2006. (www.schoolconnectivity.net, April 11, 2006)

Calculating the *total numbers of forum postings* on the School Connectivity website for the past three years reveals that the number of postings for the SEE region and the United States are about the same. However, there are roughly half as many U.S. participants as SEE participants contributing the same number of postings (See Table 6.5). On average, 36 percent of the Americans account for roughly 80 percent of all postings in the United States. In contrast, about 23 percent of the SEE participants, on average, are contributing approximately 80 percent of all postings for the region. In other words, although fewer in numbers, more of the Americans are posting than the SEE participants. Larger percentages of participants in Kosovo, Macedonia and Montenegro contribute postings than the other countries of the SEE region.

There is need for caution here. The information gleaned from the website should be interpreted as illustrative and not definitive of all the SCP online activities. Discussions with students in Bosnia and Herzegovina revealed that they considered American students less likely to respond or to keep a thread going – in other words, they post something but do not continue the communication. The Bosnians thought other students from the SEE region were more responsive. So, while aggregate numbers may reveal general patterns, they may not always offer a full and accurate picture.

TABLE 6.5
Number of Forum Postings and Active Users by Country/State

Southeast Europe	# of Forum Postings	# Active Users	% of Users contributing 80% of postings for the SEE region*
Albania	1,910	115	9.6
Bosnia and Herzegovina	1,152	154	4.3
Bulgaria	905	176	3.1
Croatia	1,166	169	3.9
Kosovo	445	96	52.0
Macedonia	1,096	210	38.0
Montenegro	1,552	194	44.0
Romania	3,489	128	19.5
Serbia	1,076	156	35.8
SEE Regional Numbers	12,791	1,398	Average of 23 %
United States	# of Forum Postings	# Active Users	% of Users contributing 80% of postings for the U.S.
California	501	73	23.0
Idaho	94	29	45.0
Maryland	5,054	132	28.0
Montana	1,244	45	4.4
Ohio	2,199	97	21.0
New Jersey	59	12	50.0
North Carolina	974	93	50.0
Utah	584	124	39.0
Virginia	489	126	60.0
U.S. Numbers	11,198	731	Average of 36%

As of April 2006 (www.schoolconnectivity.net, April 11, 2006).

* Numbers are calculated from website listings.

c. Reciprocal Teacher Exchanges

In January 2005, towards the end of the Program, CRS organized an exchange visit for 18 participating SEE teachers. They were dispersed among schools in California, Ohio, Maryland, Montana, Utah, and Virginia.

The 18 SEE teachers were selected to participate on the basis of the following criteria:

- An application process;
- An interview with the Public Affairs Officer at the U.S. Embassy in the respective countries;
- The extent of teacher activity in the Program;
- English language proficiency; and
- Teacher presentations created to share with colleagues in the United States.

Upon arriving in Baltimore, where CRS' headquarters is located, the teachers had a two-day orientation that included relationship building and action planning for their visits. This orientation enabled the SEE teachers to depart for their host school visits with a much clearer idea of what they themselves could bring to the exchange, rather than what they would receive from it. The teachers also learned about the NGO sector in the United States and how these

organizations function. They made comparisons with civil society organizations in their countries.

While visiting their host schools, the teachers stayed with host families and were treated to various field trips and tours. The SEE teachers offered classes as well, giving presentations, and visited classes outside their specific subject area. The teachers from the SEE region witnessed different methodologies in action and obtained hands-on experience in using them. CRS staff members see a direct correlation between teacher exchanges and these teachers' ability to adopt and adapt new teaching methodologies.

Eight U.S. teachers were selected, via an application process, to participate in an exchange visit to the SEE countries between March and June 2005. Unlike the SEE teachers, the U.S. teachers were unable to travel together as a group due to scheduling conflicts (work and spring break scheduling differences, etc.). The U.S. teacher exchanges varied in length from two to three weeks. They came from California (all from Los Angeles), Ohio, and Montana. The eight teachers were distributed among different schools in various countries: Albania, Bulgaria, Croatia, Kosovo, Macedonia, Montenegro, Romania, and Serbia.

Each visit began with a two-day orientation in the country's capital city, after which the teachers traveled to their schools. Many of the U.S. teachers had the opportunity to visit more than one school in the country. The U.S. teachers also prepared presentations about themselves and the United States.

CRS staff confirmed that this face-to-face exchange might have been crucial in establishing links that could help sustain the Program once the funding ended.

d. Conferences

CRS organized national conferences and a five-day international conference in April of 2004, held at Lake Ohrid in Macedonia. Each school was permitted to send a teacher and two students to the national and international conferences, and there was a competitive selection process for those events. In the case of Bosnia, the national conferences were for teacher training and did not include students.

Approximately 300 teachers and students from across the region and the United States attended the international conference. The stated objective of the international conference was to realize the project goals of cultural understanding and intercultural communication through technology. The conference had a loose agenda, which allowed the participants plenty of time to get to know one another. International conference activities were also intended to reinforce the connections made through virtual exchanges and to establish a network of people who could continue to work towards the goals of the Program once its funding ended.

Workshops were organized around the following themes:

1. IT Project Skills Building;
2. Creative Use of IT in Education;
3. Online Collaboration and Empowerment;

4. Communication for Global Citizens;
5. Multicultural Understanding; and
6. Learning in a Fast-changing and Troubled World.

During the general sessions of the international conference, students displayed their websites and made presentations about their hometowns. They also answered questions about their local cultures and town histories. The students and teachers had time to plan for future joint projects, many of which involved the development of joint websites.

The international conference gave the U.S. participants an opportunity to meet their SEE partners. Forty-two teachers and students came from the United States for a ten-day visit. In addition to attending the conference, they visited schools in the region. CRS instructed the U.S. teachers to select students who had been active and prepared to make presentations about the United States. The CRS staff indicated that the U.S. students made school posters for the conference and brought along souvenirs to trade with the SEE students.

D. The School Connectivity Program in Bosnia and Herzegovina and Program Outcomes

The SCP in BiH was organized through extra-curricular activities and operated in ten schools. CRS implemented it directly. The goals of SCP in BiH are as follows.

1. To build understanding between U.S. citizens/communities and citizens/communities overseas participating in the Program, and among countries, regionally and internationally.
2. To catalyze and assist education reforms, including project-based learning, collaborative learning and using technology in the classroom.
3. To develop skills and knowledge for teachers, students, regional coordinators, trainers and other participants.
4. To build sustainability, in terms of resources, activities, and linkages.
5. To promote inter-ethnic dialogue among students from different Southeast European countries, as a mechanism for reconciliation and regional stability.

Effectiveness in reaching the long-term goals and outcomes is examined below.

1. Mutual Understanding

Students stressed that making connections with others outside their towns, their countries, and their regions was particularly meaningful to them. The students in Bugojno said that they had benefited a great deal because they had had the opportunity to learn about other cultures and societies – and gain a new perspective. One student said, “We found we were very liked by others – and that we just have different conditions.”

As a result of SCP activities, students clearly expressed sentiments and attitudes that demonstrated more openness towards others, to the world, and a desire for more learning.

- *I would like to learn more about other cultures, their ways of living, their religions.*
- *...it's been very useful - we communicate, and get informed about things in the world.*

- Students in Bosnia

SCP/BiH effectively linked this goal to that of inter-ethnic dialogue, conflict resolution, and reconciliation, discussed below. The symbiotic relationship between these two goals was reflected in Program structure and content and certainly worked to the mutual reinforcement of both.

2. Educational Reform: New Methods in the Classroom

Students and teachers alike indicate that the SCP/BiH has been effective in enhancing a teacher's ability to adopt new teaching methodologies. It has been a catalyst and impetus for reform, helping them make changes in the way they teach. It has provided them with unique platforms for introducing new teaching methodologies into the classroom.

Basically, the Program has built teachers' capacity to work in new ways...This Program has brought a real increased focus on IT learning...

- Teacher in Bosnia and Herzegovina

Teachers of the Bugojno Gymnasium have begun to integrate new IT and computers into several subjects: math, information sciences, and English. Math teachers in Doboj have combined the direct use of the technology and computers in the classroom with new "team-teaching" approaches. This has given them much more flexibility in how they teach and inspired them to think creatively about their work. In response to changes in both teaching methods and the presentation of complex subjects, the student learning process has also undergone a transformation.

We did a pilot "team teaching" of math on computers, calling it Mathematics Yesterday, Today and Tomorrow – we videotaped it and have shown it to other schools... One teacher led the class; another walked around and helped students with the computer aspect. We used geometric simulations, showed trigonometric functions and what would change when you changed a data point or whatever – how the line changes. The computer use allowed us to do so much more in a little time – changing the data a little changes the function a lot; we could show them [students].

- Teacher in Bosnia and Herzegovina

Teachers indicated that they are also looking for ways to integrate IT into other subjects. Students in Bugojno discussed one creative approach to doing so. They noted that Program teachers often gave them ideas and advice on how to use the Internet for schoolwork, so that it was not simply confined to SCP after-school projects.

The collaborative nature of SCP online activities, in particular, has exposed students and teachers to new, cooperative ways of doing things, something beneficial and positive for learners.

...That was not something we ever did in school, for example, when we teachers were children... We [the teachers] are the ones who are now learning this new method – to challenge our old teaching styles with new group work methods, to encourage cooperation.

- Teacher in Bosnia and Herzegovina

A teacher from Doboj emphasized that the SCP Program is unique because it gives the students a novel opportunity to work together, while providing significant learning opportunities for teachers, as they implement the curriculum. One student demonstrated enthusiasm for “...being and working together, exchanging our information with others in the Program from elsewhere, and making the posters about what we learned.”

Finally, one of the English teachers from Bosnia and Herzegovina explained that she was exposed to new ideas and new teaching methods during her exchange visit to the United States: “On my exchange, I picked up great ideas on how to teach foreign language classes... I saw different games the teachers played with the students when they’re tired.”

3. Skills: IT Research Skills and Self-esteem

a. IT Research Skills

Teachers made connections between student involvement in the online SCP activities, improved skill levels, and greater enthusiasm for their work.

I've seen the kids really improve in this project. They're tired of math by itself, or at least, they think it's primitive. With new technology, they can explore and communicate, practice their English, pursue their interests. That's unique to this project.

- Teacher in Bosnia and Herzegovina

A computer science teacher in Doboj commented on the students’ integration of their improved and diverse skill set across the curriculum as a result of participating in this project.

The students in the discussion groups also indicated that their Internet research skills had improved significantly, and had a positive effect on their coursework in general. Indeed, since starting the Program, the students in the Bugojno Gymnasium said that they used the Internet more for school work than they had previously.

- *I want to study journalism, and I get a lot from the Internet...for our school newspaper, we do lots of research on the 'Net.*
- *Most employers are looking for people who speak English and who know how to use computers and the Internet.*

- Students in Bosnia and Herzegovina

One student in Bugojno said, “The Internet has information that we can’t find in books.” Students in Travnik noted that the SCP experience had been particularly useful, as it helped them obtain new study skills and important job-related skills.

The English teacher in Doboj explained that students really love using the Internet. She went on to say how amazed she was that they [students] were all so happy to have the opportunity to participate in the online activities, not just the opportunity to travel to Ochrid, Macedonia for the regional conference.

b. Improved Self-esteem

Unit 2, “Our Town: Who Are We,” had a particularly positive effect on student perceptions of themselves as they researched and then constructed websites about their towns. The reinforcement of positive sentiments regarding one’s own town is an important component of any healing process and reconciliation and should not be underestimated. Student comments were very revealing, including the following.

- *I was glad we got to introduce our city to others around the world (via City Website).*
- *I’m really proud of our culture, our country, and the friendships made in the Program. I like my town!*

- Students in Bosnia and Herzegovina

4. Reconciliation: To Promote Inter-ethnic Dialogue

As noted above, SCP relies on the philosophy that knowledge of the “other” as human beings, rather than as political opponents from a different ethnic, national or religious background, is a key avenue to conflict resolution and reconciliation. As a result, SCP online activities have exposed participants to other students from their region (in some cases from the same country) and this communication has shown them some very simple things they have in common. The students in Bugojno mostly conversed on the Internet with other students from the former Yugoslav countries – in particular, Croatia and Macedonia. Bugojno is a Muslim town, whereas Croatia and Macedonia are predominately Christian countries. Given the ethnic differences, the fact that they learned about common interests and pursuits is important to the process of reconciliation.

Students at a Nursing High School in Mostar now see similarities between their country and Albania and Kosovo. While Mostar is an ethnically diverse town, split between Catholic Croats and Muslims, the SCP school in Mostar is Catholic. The virtual exchanges with students from Albania and Kosovo exposed these students to others from a different ethnic group. In spite of differences, students expressed their sense of these commonalities: “...basically that all three [Bosnia and Herzegovina, Albania, and Kosovo] are small countries and many people want to leave them to visit other places and find a better way of life.”

In many cases, it is evident that there is still a lot of work to be done, as real barriers (such as hostility and physical separation) exist between groups in close proximity in Bosnia and Herzegovina. When asked what they have learned that surprised them, the students from the

Bugojno Gymnasium said “life in Doboj.” While Bugojno is Muslim, Doboj is an Orthodox, Serbian town. A teacher from Doboj had traveled to their school and made a presentation about Doboj and about her experience on the SCP exchange visit to the United States.

It seems that physical exchanges and face-to-face interaction is critical at some level; as these coaxed students into inter-ethnic dialogue in Bosnia.

It would be a help if you could fund some smaller projects like this, between the different “nationalities” here – we need more help to bridge that gap, though it’s already working to some degree. If we could get the kids to meet each other, it would make a lot of difference.

- Teacher in Bosnia and Herzegovina

SCP can use its online activities and projects as a means of introducing the students to each other and then engaging them in projects that require some interaction on the ground. The teacher in Bugojno recommends that students be given the opportunity to meet other students in BiH to facilitate exchanges between schools that allow the students a chance to meet in person.

As part of this evaluation, two groups of students in Travnik (Croat students from a Catholic school and Muslim students from a madrassa) attended a discussion session together. At first, the groups sat separately, often with their backs turned to each other. There was little or no interaction between the two groups. The moderators had to prod the students to engage each other in dialogue. However, by the end of the discussion, the students were intermingled and spoke about the Program and the common ground they had found during the discussion.

5. Community Involvement

The Program was structured such that it involved the community in various activities, including them in the project work for Unit 2 (Our Town: “Who Are We”) and Unit 4 (Building a Collaborative Community: “What We Can Do Together”), which required interaction between students and local community members. For example, one teacher indicated that the larger class projects required students to work in small groups to research local culture and history, interview local cultural leaders, and attend local events, some filmed by students for their website.

The Principal of the Doboj Secondary Technical School stressed that the next phase of the SCP project should bring students, parents, teachers, and communities to the ILC for discussions of democratic processes and practices in Doboj. He linked this to democratization in Bosnia and Herzegovina and its inclusion in the European Union.

Without [democracy and human rights], we don’t have a place in Europe.

- School Principal in Bosnia and Herzegovina

6. Partnerships with U.S. Schools and Impacts on U.S. Teachers and Students

a. Nature of Partnership

The SCP in SEE typically did not have direct partnerships between a single school in the region and a single school in the United States. Rather, schools were assigned to clusters (23 in total) to work on the four units that comprised the curriculum. In the case of St. Mary's Ryken High School, however, the school joined a cluster and among its partners was a private Catholic school in Travnik, BiH. The teacher who initiated the project had started an after-school Building Bridges Club, and wanted to expand the activities of this club. He worked closely with CRS in Baltimore which managed the relationship between the school and partner schools.

b. Activities

St. Mary's Ryken High School's Building Bridges Club targets junior and senior high school students for a two-year activity cycle. In their first year, students are exposed to global issues and participate in classroom assignments that fulfill a school-wide social justice course requirement. Main topics of study included regional history and conflict resolution. During the second year, students participate solely in the Building Bridges Club and examine community and cultural issues through chats and online fora with partner schools. Building Bridges Club and SCP activities for senior students also involved video projects, picture projects, and building websites.

One student was selected to participate in the SCP international conference that CRS held in Macedonia, bringing together students and teachers from all of the countries of Southeastern Europe and the United States. This experience gave a realistic sense of the views Macedonians (and other Southeastern Europeans) had of Americans and vice-versa.

The teacher participated in two, week-long School Connectivity Program training sessions in Baltimore, which gave him an opportunity to meet other teachers around the county working on similar activities. A result of this training was a Yahoo Groups forum for teachers to maintain dialogue and exchange information on interesting projects. In addition, teachers from South Africa and Great Britain (through the Building Bridges Club) participated in an independent teacher exchange. This exchange provided an opportunity for teachers to share their ideas and meet with students within the Program.

c. Impact on U.S. Teachers and Students

The students revealed that the School Connectivity Program has been a useful lesson in tolerance and appreciation of others. In addition to developing leadership skills, it has also encouraged some students to pursue a career in international affairs. The teacher said that it was "the students' emerging global perspective that was so important" about both the Club and the Program.

The teacher appreciated seeing the growth in students' understanding of the world and their role as American leaders. The exposure he has given his students through the Program has been a rewarding aspect of teaching. He said that at the school level, "The majority of our students are

now informed about SEE. The kids are talking about issues outside of everyday topics, because they're learning and they're interested."

E. Summary Observations

For the most part, the SCP in SEE did meet many of its stated goals, acting as a catalyst for mutual understanding, educational reforms and innovations in classroom teaching, skill improvement, dialogue, and first efforts at reconciliation.

The reliance on school clusters and the four curriculum units provided effective organizational and design structures which served as the foundation for the Program. There were many advantages to unit activities: 1) students were exposed to members of their own communities; 2) students were provided with a forum to act as active change agents; and 3) the activities created an environment where students worked collaboratively in teams to solve problems. This was particularly evident at the community level, where students became engaged in issues of concern to their own towns and schools. Indeed, community action was one area where students in the region were able to develop a dialogue across national boundaries due to the structure of Unit 4. Perhaps, had other units been structured in a similar fashion, additional topic areas could have been discussed across national boundaries.

Teachers and students alike were enthusiastic about the collaborative aspect of the online activities. They were quite receptive to this new approach and were energized by working together. Teachers, in particular, benefited, because introducing these new methodologies into their classrooms provided new learning opportunities for them.

Individual teachers were able to integrate the use of IT into the classroom creatively and generated interesting innovations in how subjects are taught and how students learn. Two math teachers in Bosnia and Herzegovina felt that by using the computers in the classroom, they were able to accomplish more in less time, and, more importantly, make the subject matter more interesting to students. Complex mathematical concepts suddenly were intelligible to the students, as they used computers to simulate mathematical functions.

Finally, through dialogue and interaction, many of the students expressed recognition of commonalities shared with others in their country or region of different ethnic backgrounds. While the more oppositional aspects of conflict resolution and reconciliation were not tackled head on, there are numerous indications that encounters and online communications enabled participants to recognize similarities, rather than differences.

7

STUDENT INTERNET SURVEYS

SCP AND BRIDGE PROGRAMS

Chapter Seven

A. Introduction

A survey of students participating in this regionally diverse set of Programs was a critical component of the evaluation. It enabled the evaluation team to gauge the effect of the SCP and BRIDGE Programs and determine outcomes, as understood or witnessed by its immediate beneficiaries.

This chapter begins with a brief discussion of key findings on Program outcomes. It then reviews student activities, topics and modes of discussion, and presents an in-depth assessment of Program efficacy in reaching State Department and Program objectives.

B. Key Findings

1) Building Mutual Understanding and Fostering Cross-Cultural Learning

- A majority of the SCP and BRIDGE students indicated that participation in these Programs has changed their views and increased their knowledge of the culture of the United States and other countries that participated in the Program.
- No matter how much or how little students knew about the United States, participation in the Program has changed their understanding of culture and daily life in the United States.
- Most students surveyed have favorable views of the American people.

2) Catalyzing and Assisting Educational Reforms

- The survey indicates that, as a direct result of their participation in these online Program activities, BRIDGE students, in particular, feel empowered to try new things and initiate changes at school, including new curricula. About half of the SCP students indicated that they have introduced new ideas at school as a result of their participation in the Program.
- Sixty-seven percent of the BRIDGE students indicate that they selected topics for discussion in the online activities. The very fact that the Program activities are student oriented and, in some cases, student initiated (e.g., student selection of topics), reflects innovations in teaching pedagogy and classroom environments.

3) Development of Skills and Knowledge

- Students from both the SCP and BRIDGE Programs report that they have learned a substantial number of new computer skills and applications.
- A majority of the students indicate that they access the Internet more frequently now than prior to joining the Program.

- Over 73 percent of students rate their computer skills as very good or excellent.
- The proximity of a computer lab matters. SCP students who have access to a computer lab at their school are more likely to access the Internet daily.

4) English Language Skills

- English language skills are an area where students in both Programs report noticeable improvements.
- Approximately three-quarters of the BRIDGE students feel that their command of English is very good or excellent.
- Students corroborated observations from teachers in Armenia, Lebanon, and BiH. English language skills determine not only *what* students do in these Programs but also *the extent* to which they are able to take full advantage of the opportunities to communicate with students who speak other languages.

5) Multiplier Effect of English Language Instruction

- A majority of the BRIDGE students indicate that the Program has enabled them to better express themselves in the online fora. BRIDGE teachers in Lebanon report that the BRIDGE Program has contributed to their students' increased self-esteem and ability to communicate.
- Eighty percent of the BRIDGE students believe that the English language skills developed in the Program have improved their performance in other coursework.

1. Who Responded to the Survey: Student Characteristics

Across SCP and BRIDGE, students who responded to the Internet-based survey ranged from 15 to 17 years of age, and have participated in the Program approximately one year, on average. There were some gender differences across the regions: SCP students responded in generally equal percentages of girls and boys; students in the BRIDGE Program, however, are mostly represented by girls (75% of all respondents).

Table 7.1 shows the country breakdown of those students who participated in the online survey. The countries with the highest numbers of respondents are: Armenia, Tajikistan, Uzbekistan, and Pakistan.

TABLE 7.1 Countries where Students Live		
Country	Number in Sample	% of Total
SCP		
Albania	36	5.4
Armenia	213	32.2
Bosnia and Herzegovina	4	0.6
Morocco	1	0.2
Tajikistan	217	32.8
Uzbekistan	110	16.6
United States	19	2.9
Croatia	33	5.0
Macedonia	28	4.2
<i>SCP Total</i>	<i>661</i>	<i>100.0</i>

BRIDGE		
Lebanon	8	7.9
Morocco	12	11.9
Pakistan	81	80.2
<i>BRIDGE Total</i>	<i>101</i>	<i>100.0</i>

2. Student Activities

Across the two Programs, four activities stand out as the “primary” activities for students: online fora, online projects, special presentations and research projects with other students. By far, the activity that attracts the highest percentage of students is the online fora (69% of all surveyed SCP students and 91% of surveyed BRIDGE students).³⁶

Still, a relatively consistent percentage of students in SCP (40-50% approximately) indicate that they actively participate in *all* the activities outlined in Table 7.2. Even though more BRIDGE students participate in online activities, the percentages reveal an uneven distribution across the range of activities. A clear majority of students in the BRIDGE countries participate in online fora, online projects, special presentations and research projects with other students. These four activities are reflective of the structure of the Program, as implemented by iEARN (see Chapter 4, Case Study of the BRIDGE Program in Lebanon).

TABLE 7.2		
Student Reported Activities: Percent who Participate		
Activities	SCP (%)	BRIDGE (%)
Online fora	69.4	91.1
Website development	41.0	46.3
Online projects	57.0	83.2
Online classes/courses	43.1	29.7
Special presentations	50.7	73.3
Research projects w/ other students	43.7	84.2
Research projects w/ teachers	42.2	61.4
Own research project	40.2	59.4
Attend national, regional and/or international conference as part of Program	28.0	7.9
<i>Sample Totals</i>	<i>661</i>	<i>101</i>

Almost all of the SCP students (97%) indicate that they rely on computers at their own school or another school. The BRIDGE students appear to have a wider range of options – their school, another school, or other locations (which may include home and/or Internet cafes, for example).

The Programs diverge as to timing of Program activities. Students in the SCP Program note that activities occur outside of normal school hours, whereas a large percentage of BRIDGE students indicate that they participate in Program activities during normal school hours. This, however, does not necessarily mean that the activities are integrated into the normal coursework in the BRIDGE countries. It implies that BRIDGE students are able to avail themselves more easily of the computer centers during the day, either because of the structure of their normal, school-day

³⁶ Some caution is in order in reviewing percentages. In some cases, especially when the number of students responding is somewhat smaller, just a few responses can change actual percentages dramatically.

activities, or the setup and availability of the computers at the school (including the Internet connection).

3. Activity Locus

Some Program activities occur more within a single country than across two or more countries. The online survey asked students to indicate with whom they interact through the online activities. Table 7.3 shows that nearly 60 percent of SCP students engage in online fora with people from their own countries, while the other 40 percent interact in online fora with people from other countries.

TABLE 7.3 Student Interaction in Online Activities: Inside vs. Outside of Country				
Activities	SCP (%)*		BRIDGE (%)*	
	Inside Country	Outside Country	Inside Country	Outside Country
Online Fora	59.7	40.3	71.7	28.3
Website Development	84.9	15.1	90.3	9.7
Online Projects	74.0	26.0	67.9	32.1
Online Classes/Courses	80.7	19.3	90.0	10.0
Special Presentations	78.8	21.2	66.2	33.8
Research Projects w/other students	75.1	24.9	90.6	9.4
Research Projects w/ teachers	87.5	12.5	88.7	11.3
Own Research Projects	85.0	15.0	93.3	6.7
* Sample includes only those students who indicated that they engaged in these activities. For example, 92 BRIDGE students said that they engage in online fora; of these 92 students, 26 (or 28.3%) indicate they interact with students outside of their country.				

On one hand, most students (80% or more) in this survey note that three types of activities occur within a country:

- Website development;
- Online classes/courses; and
- Research projects (with other students, with teachers and individually).

On the other hand, students indicate other activities involve more participation from students across countries:

- Online fora;
- Online projects; and
- Special presentations (to a lesser extent).

Within a country, certain activities generally take place within individual schools, among people who most likely interact physically (at least some of the time) and who know each other outside the context of the Program. These are: 1) website development; 2) online classes/courses; and 3) research projects (particularly with teachers or individually). This is most likely due to the structure of the activities, in the case of website development and research, and not the nature of the Program. The one exception may be online classes. The current structure of the SCP does not mirror the characteristics common to many successful online classes: intense, dedicated effort on the part of the teacher and a dedicated web space (i.e., class website). Expanding the reach of

online classes could involve some changes in the way Programs are implemented in these countries, if this is seen as an important goal.

When students interact with others from different schools in their own country, it is through engagement in online fora, online projects and special presentations. It may be that these activities lend themselves more to a virtual space than others. *It is important to note that projects do not necessarily require that people be in close proximity, and that the online environment can sustain this type of activity when organized to facilitate virtual interaction.*

4. Topics of Discussion

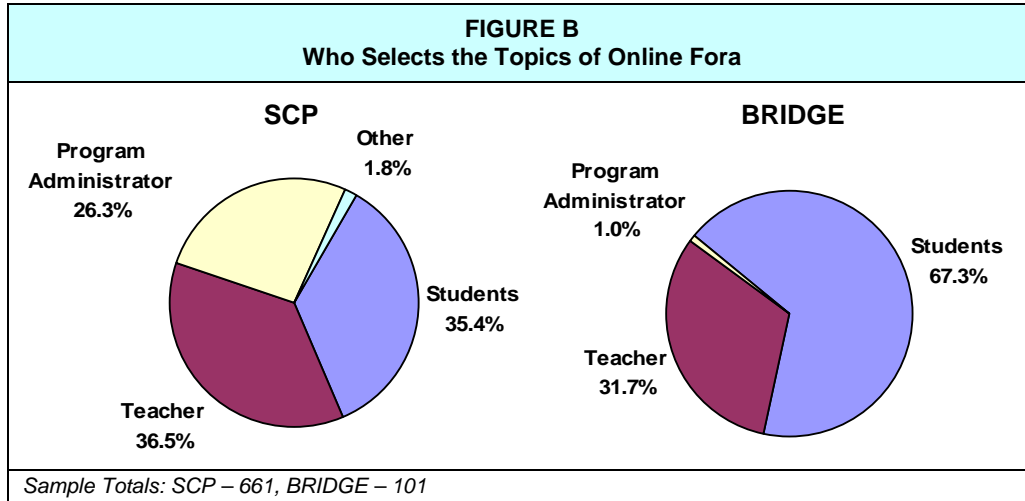
The SCP and BRIDGE Programs offered a wide range of activities that were a basis for discussion fora on select topics. Students in the online survey were asked to highlight the three topics discussed as part of their *main Program activities*. Results are shown in Table 7.4. As expected, there are some differences between the two Programs.

TABLE 7.4 What Students are Talking About			
Discussion Topics	SCP (%)	BRIDGE (%)	U.S. (%)
Local community issues/government	18.3	64.4	20.0
Culture, religion, history	47.2	92.1	70.0
International or current events	19.8	64.4	25.0
Ethnic and race relations	9.1	6.9	10.0
Conflict resolution	10.5	6.9	30.0
Education	58.7	76.2	35.0
Environment/natural resources	13.6	66.3	0.0
Popular culture	25.8	12.9	0.5
American studies, holidays	18.3	2.0	10.0
English	30.6	53.5	0.0
Health	18.0	5.9	0.5
Issues affecting vulnerable groups	9.7	1.0	20.0
Gender issues	9.2	5.9	15.0
Ethics	10.9	5.0	0.5
Information and communication technologies	25.7	10.9	0.5
Sample Totals	661	101	20

While all topics were the subject of discussion at some point during the Program, a high percentage of the SCP students (25% or more) engaged in activities devoted to education, culture/religion/history, English, and IT. An even larger percentage of BRIDGE students (over half) indicated that they discuss culture/religion/history, education, as well as local community issues, environmental/natural resources, and English. Whereas almost one-fifth of the SCP students “talked” about American studies or holidays, very few of the BRIDGE students reported having similar discussions.

One interesting aspect of the Programs is who selects the topics of conversation (see Figure B). BRIDGE students have considerably more autonomy and initiative when it comes to selecting the topics of discussion than SCP students (67% of BRIDGE students compared to only 35% of SCP students). While teachers across the two Programs seem to select topics to the same degree

(31% to 36%), it is the role of the Program administrators that varies widely, at least as reported by the students.



In general, the Program administrators play a much bigger role in selecting topics of discussion in the SCP countries than in the BRIDGE countries (26% versus just 1%). This is also reflected in site visit interviews on the SCP Program in Armenia, where Program administrators played a very visible role in determining many aspects of the Program. One ostensible consequence of this is that teachers and students may not be as prepared to initiate and sustain activities once U.S. funding ceases, because they have relied on the input of the Program administrator (or deferred to them). The iEARN country director in Lebanon was very clear on this point. She encourages teachers and students to initiate activities of their own interest. As a result, she feels that the BRIDGE Program in Lebanon has built up momentum on its own and does not depend upon her intervention.

C. Program Outcomes

1. Mutual Understanding

The BRIDGE and SCP Programs facilitate mutual understanding and cross-cultural learning. Seventy-seven percent of the SCP and 89 percent of the BRIDGE survey respondents stated that working on joint projects with partner schools resulted in a better understanding of their partner's culture or society.

TABLE 7.5 Joint Projects and Mutual Understanding		
	SCP (%)	BRIDGE (%)
To what extent have the joint projects with partner schools helped you gain a better understanding of your partner's culture or society?		
To a large extent	38.0	45.3
To some extent	39.9	44.0
To a small extent	6.3	8.0
Don't know/not applicable	3.3	2.7
Sample Totals	539	75

This is a critical element of the Program, whose activities often provide students with new sources of information or fill a particular gap in information. Students were also asked to rate their understanding of U.S. culture, values, and daily life. Almost 33 percent of SCP students in the survey have a basic knowledge of U.S. values and culture and additional one-third of the students reported having advanced or more than basic knowledge. Twenty-one percent of them have a basic knowledge of daily life in the United States, and 33.4 percent have either advanced or more than basic knowledge of this topic.

The BRIDGE students know less about U.S. values, culture, and daily life than the SCP students. Approximately half of the BRIDGE students in this survey (53%) believe they have less than basic knowledge of U.S. values and culture, compared with 22 percent who have a basic knowledge and 17 percent who have more than basic knowledge. Forty-four percent of them admit to a less than basic knowledge of daily life in the United States, again, compared with 31 percent who have basic knowledge of this subject, and 19 percent who report having advanced knowledge (see Table 7.6).

TABLE 7.6		
Student Understanding of the United States		
	SCP (%)	BRIDGE (%)
Student understanding of knowledge of U.S. values and culture		
Advanced knowledge	15.8	6.9
Beyond basic	17.3	9.7
Basic knowledge	32.5	22.2
Less than basic	22.0	52.8
No knowledge	12.5	8.3
<i>Sample Totals</i>	<i>514</i>	<i>72</i>
Student understanding of daily life in the United States		
Advanced knowledge	17.2	12.9
Beyond basic	16.2	5.7
Basic knowledge	21.3	31.4
Less than basic	15.6	44.3
No knowledge	8.5	5.7
<i>Sample Totals</i>	<i>521</i>	<i>70</i>

In the course of their online interactions, SCP and BRIDGE students were exposed to various aspects of U.S. culture, values, and daily life. Indeed, the BRIDGE students in this survey report substantial changes in their understanding of U.S. culture, values, and daily life as a result of the BRIDGE Program. As shown in Table 7.7, 81.4 percent note moderate or substantial change in understanding of values and culture, and 84.1 percent in their understanding of daily life. While SCP students' changes in understanding were smaller, they were also significant: 53.6 percent report a moderate or substantial change in understanding of U.S. values and culture, and 53.5 percent report similar changes in understanding of daily life in the United States.

TABLE 7.7 Changes in Student Understanding of U.S. Culture, Values and Daily Life		
	SCP (%)	BRIDGE (%)
How much did participation in the Program change your understanding of U.S. values and culture?		
No Change	23.2	2.9
Minimal Change	23.2	15.7
Moderate Change	37.1	50.0
Substantial Change	16.5	31.4
<i>Sample Totals</i>	<i>448</i>	<i>70</i>
How much did participation in the Program change your understanding of daily life in the U.S.?		
No Change	24.2	1.4
Minimal Change	22.4	14.5
Moderate Change	30.2	29.0
Substantial Change	23.3	55.1
<i>Sample Totals</i>	<i>447</i>	<i>69</i>

The data also reveal that all of the students learned something through these Program activities, not just those at the top (with advanced knowledge) or those at the bottom.³⁷

It is not clear why these BRIDGE students report more change than the SCP students in their understanding of the United States as a result of the Program. It could be any or a combination of numerous factors. For example, perhaps the focus on online communication and projects emphasized by the BRIDGE Program, rather than the SCP emphasis on technical skills and regional (not international) dialogue, could account for these differences. It could also be the types of topics that the students discuss. More BRIDGE students report discussing “culture, religion, history” and “international or current events.” Or it may be something else (i.e., cultural norms, levels of knowledge base in these countries, pre-existing access to information about the United States in these countries, cultural propensity to report positive responses, etc.) and not the Program structure itself that is associated with these differences. Unfortunately, the survey data do not provide specific insight into reasons for these differences.

Finally, BRIDGE students in this survey report a very positive view of the American people – 87 percent of them say they have a generally or strongly favorable view. Approximately 78 percent of the SCP students feel this way as well.

2. Educational Reform

While the *student survey* did not focus on educational reform, it posed three questions that can be used to assess the extent of student-initiated changes and their sense of empowerment resulting from these Programs. Student pronouncements about their success in introducing new ideas, new ways of doing things, as well as new curricula and educational standards may mean new or changing approaches to classroom teaching in these countries.

³⁷ The data were analyzed but are not presented in a Table in this report.

TABLE 7.8		
Student Perceptions of Self-Initiated Changes		
Initiate formal or informal changes in your organization	SCP (%)	BRIDGE (%)
Introduced new ideas and knowledge	56.3	98.0
Introduced initiatives, new ways of doing things	39.8	97.0
Introduced new curricula, pedagogical methods, or educational standards	17.2	43.0
<i>Note: Sample counts varied by indicator (BRIDGE sample is 100, 99, and 86 in the order presented; SCP sample is 611, 591 and 582 in the order presented).</i>		

Given the traditional educational systems and approaches to education so ensconced in these countries, these changes reflect the ability of Connectivity Programs to create environments more conducive to reform. Without exception, almost all of the BRIDGE students noted that they had introduced new ideas (98%) and new ways of doing things (97%). Not only that, 43 percent of the BRIDGE students in this survey stated that they had introduced new curricula and new educational standards. Fifty-six percent of the SCP students claimed that they had introduced new ideas and knowledge; and almost 40 percent affirmed their ability to introduce new curricula and pedagogies. These numbers provide clear evidence of a sense of student empowerment and change in face of systems reportedly structured in a top-down fashion, and often resistant to reform.

Is it possible to account for differences between the Programs? On one hand, perhaps the SCP countries are generally less conducive to change, or perhaps students experience these limitations more concretely. On the other hand, perhaps the educational system in the BRIDGE countries is so rigid, that students see these changes as quite dramatic. Information gathered from the site visits in Program countries also reveal potentially pertinent differences in the structure of the SCP and BRIDGE Programs themselves. The BRIDGE Programs are clearly focused on student-centered projects and communication (data presented earlier shows that BRIDGE students tend to select the topics of discussion, for example). This may account for large percentages of students who sense that their participation in these activities has been the catalyst for change, for concrete actions. The SCP Programs are more hierarchically structured and oriented more towards technical skills. These differences may affect student perceptions, as well as the possibility for more change in the classroom. While this issue is not a focus of this evaluation, these subjects are worthy of more review, as Connectivity Programs continue to work towards institutional reforms.

3. Computer Skills

Students in the SCP and BRIDGE Programs say they are developing marketable technical skills and they report greater use of IT in their schools, both key objectives of the Programs. As indicated in Table 7.9, an overwhelming majority of the students (87.1% SCP; 78% BRIDGE) report that as a result of these Programs, their computer skills have improved. Likewise, a clear majority of these students (78.9% SCP; 74.6% BRIDGE) indicate that they access the Internet more frequently now than they did prior to their participation in the Programs.

The SCP and BRIDGE student responses are similar in terms of the skills learned during their participation in the Programs. A vast majority of BRIDGE students have acquired skill in particular computer applications: Internet research (90.9%), online discussion (91.9%), e-mail

(85.9%) and word processing/spreadsheets (81.8%). A fairly large percentage (roughly 40%) say they learned PowerPoint as a result of their participation in the Programs.

TABLE 7.9 Skills Students Have Acquired		
	SCP (%)	BRIDGE (%)
Computer Applications and Skills Learned		
Internet Research	60.3	90.9
E-mail	79.1	85.9
Word Processing and Spreadsheets	62.9	81.8
Online Discussions	57.8	91.9
PowerPoint	45.5	40.4
Website Development	25.4	13.1
<i>Sample Totals</i>	661	101
Computer Skills		
Students report computer skills improved	81.7	78.0
<i>Sample Totals*</i>	513	100
Frequency of Internet Use		
Students report increase in Internet use/access	78.9	74.6
<i>Sample Totals*</i>	586	98
<i>* The sample is smaller because some students couldn't rate their ability or frequency of Internet use, so it was impossible to compute a change.</i>		

The percentage of SCP students acquiring specific IT skills is also quite sizeable: e-mail (79.1%), word processing/spreadsheets (62.9%), Internet research (60.3%) and on-line discussions (57.8%). SCP also focused on building students' skills in graphic design, Photoshop and desktop publishing. BRIDGE, on the other hand, focused on promoting a narrower set of skills. This is a reflection of programmatic goals, as well as the Program structure.

So how do the students assess their computer skills after participating in these Programs? Students of both Programs feel confident of their computer skills: 73 percent of the BRIDGE students and 79 percent of the SCP students rate their skills as very good to excellent. As a percentage, the number of BRIDGE students who rate their computer skills as not very good or poor (8%) is noticeably higher than the percentage of the SCP students in this sample (1.7%), though still quite small. There are some interesting differences between the two groups of students in terms of use: a much larger percentage of SCP students log on to the Internet every day (61%), compared to the BRIDGE students (34.3%). As noted above, most SCP students report that the Program activities occur outside normal school hours, whereas the BRIDGE students indicate that most of their Program activities occur during normal school hours. Teachers and school principals involved in the BRIDGE Program in Lebanon reported that teachers there closely monitor student access to the Internet and the iEARN website, to ensure proper use of the site. So, teachers may structure the Program activities such that fewer students log on daily.

In the case of the SCP Program in Armenia, computer centers were staffed and run by Program staff - not by teachers. Students freely entered the lab to use the computers and there was little monitoring. Students, teachers and Program staff in Armenia did indicate that the most frequent activity for students in the lab was e-mail correspondence. Hence, this structural element may

account for the higher level of daily access to the Internet reported by the SCP students in this survey.

4. English Language Skills

Both SCP and BRIDGE students in this survey report that their English language skills have improved during the period of their participation in the Program. A clear majority of the BRIDGE students (83.9%) indicated an improvement in their English language skills. Given that improving English language skills is a key objective of the BRIDGE Program, this is clear evidence of its effectiveness in doing so. Similarly, students in the SCP Program indicated they had made significant improvements (64.1%).

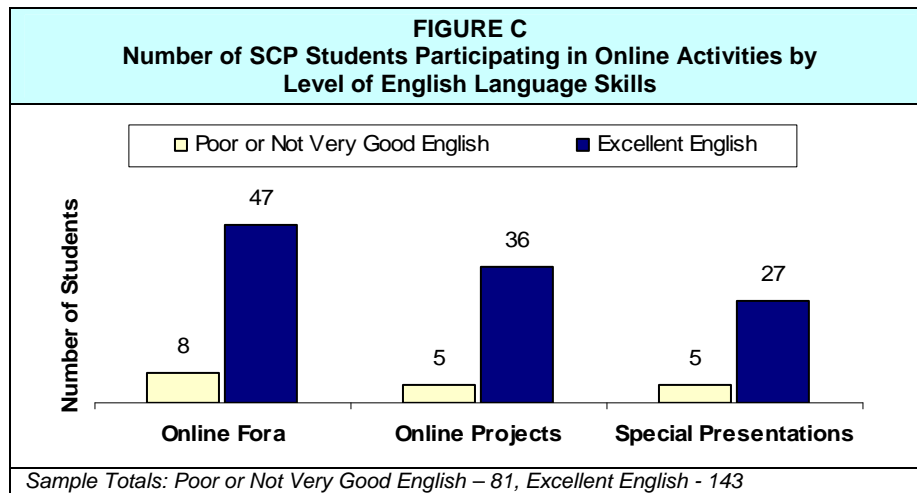
TABLE 7.10		
English Language Skills and Improvements		
	SCP (%)	BRIDGE (%)
English Language Skills Improvement		
Students report English language skills improved	64.1	83.9
<i>Sample Totals*</i>	610	87
Student Assessment of English Language Skills		
Excellent	23.0	17.2
Very Good	30.7	57.5
Average	30.8	13.8
Not Very Good	9.1	10.3
Poor	3.9	1.1
Don't Know	2.6	n/a
<i>Sample Totals*</i>	623	87
<i>* Sample totals vary because some students did not respond to both questions, which makes it impossible to compute a change.</i>		

So, how do the students assess their own abilities after participating in the Program? Three-quarters of the BRIDGE students in this survey describe their command of English as “excellent” or “very good,” and just over half of the SCP students (53.7%) do so as well. Comments from the field indicate that command of the English language is an important factor that determines student participation in online activities with students from other countries, because English is the medium of communication. To participate more fully in these more international activities, students need to be able to communicate in English.

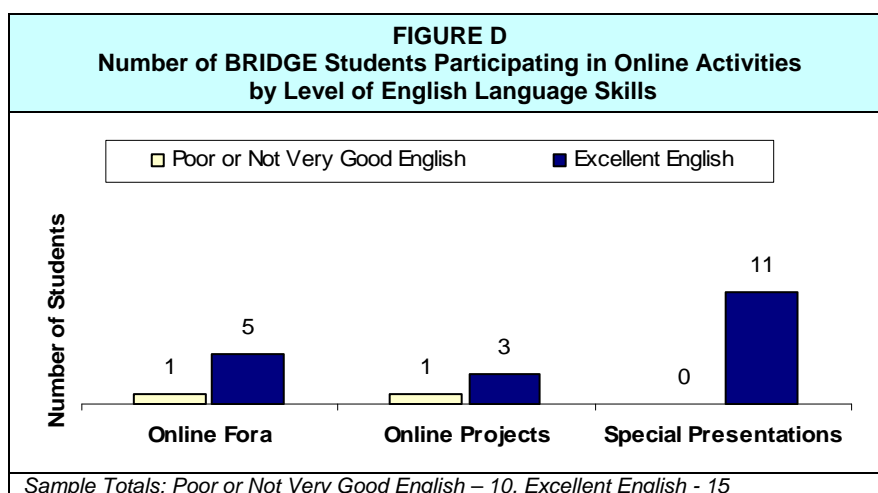
Indeed, students who rate their English skills as “poor” or “not very good” are much less likely to participate in online fora, online projects and special presentations than are students who believe that they have an “excellent” command of English. For example, of the 59 SCP students who did *not* participate in the online fora, 41 of them (69%) say their English is “poor” or “not very good.”

TABLE 7.11 Student Non-Participation in Online Activities by Level of English Language Skills				
	SCP		BRIDGE	
Do Not Participate in Online Activity	Poor or Not Very Good English (n)	Excellent English (n)	Poor or Not Very Good English (n)	Excellent English (n)
Online Fora	41	18	0	0
Online Projects	41	24	3	2
Special Presentations	44	27	6	1
<i>Sample Totals</i>	<i>81</i>	<i>143</i>	<i>10</i>	<i>15</i>
<i>Note: Because sample sizes are small, it is more useful to present exact numbers instead of percentages which can be misleading at small sample sizes.</i>				

Conversely, when we examine participation in the online activities, we see that the students with stronger English language skills are more likely to become involved in Program activities (see Figure C). Of the 55 SCP students from different countries who report participating in online fora, 47 (85%) feel that their English is “excellent,” and 36 students (88%) who rate their English as ‘excellent’ participate in the online projects. The findings suggest that English enables and encourages students to engage in online activities with students from other countries and other cultures.



The same holds true for the BRIDGE students in this online survey. Many more of the students who rate their English as “excellent” participate in the online fora, online projects and special presentations than do those who believe their English is “poor” or “not very good” (see Figure D).



Finally, another measure of the BRIDGE Program’s effectiveness has been its ability to generate a significant multiplier effect. Since the BRIDGE Program specifically sought to provide mechanisms for English language teaching, one of its key objectives was to enhance student performance in other courses by enabling them to use English language resources available on the Internet. Another key objective was to enable these students to engage other students in the “public space” afforded by the Internet and fora established by the BRIDGE Program.

TABLE 7.12 Multiplier Effect of English Language Skills In BRIDGE Program		
Extent to which English language skills improved performance in coursework for other subjects.		
	Number	Percent of Total
Large Extent	29	32.2
Some Extent	43	47.8
Small Extent	14	15.6
Not at all	1	1.1
Don't Know	3	3.3
<i>Sample Total</i>	90	100.0
To what extent has BRIDGE allowed you to better express yourself in these fora?		
	Number	Percent of Total
Large Extent	65	73.0
Some Extent	17	19.1
Small Extent	3	3.4
Not at All	1	1.1
Don't Know	3	3.4
<i>Sample Total</i>	89	100.0

The BRIDGE Program has been highly effective in improving students’ performance in their regular classes: 80 percent of BRIDGE students report that the specific English language skills acquired in the BRIDGE Program have resulted in improved performance (to a “large extent” or to “some extent”) in their other classes. Ninety-two percent of the BRIDGE students in this survey affirm (to a “large extent” or to “some extent”) that the BRIDGE Program has enabled them to better express themselves in the online fora. Similarly, in focus groups conducted in Lebanon, teachers and students alike confirmed that participation in the BRIDGE Program had

increased their self-esteem and improved student communication. The English language skills acquired through the BRIDGE Program have acted as catalysts for the application of skills throughout the breadth of the school curriculum, and for facilitating English language expression of ideas in new fora.

5. Student Satisfaction with Program

SCP and BRIDGE students in this survey indicated they are very satisfied with the Program, specifically the content, and variety and relevance of experiences. Roughly 75 to 80 percent of the students report that they are very satisfied or satisfied with these three aspects of the Program.

D. Summary Observations

The online survey gives some insight into the overall effectiveness of these Programs in achieving their stated goals. Student responses indicate that both the SCP and BRIDGE Programs have been successful in terms of the following goals.

1. Building Mutual Understanding and Fostering Cross-cultural Learning

Both the SCP and BRIDGE students indicate that participation in these Programs has changed their views of other cultures. Specifically, no matter how much or how little they knew about the United States, participation in the Programs changed their understanding of U.S. culture and daily life. By in large, most of the students have favorable views of the American people.

2. Catalyzing and Assisting Educational Reforms

While students are not the primary agents of educational reforms, they are the ultimate recipients of any reforms in the classroom. A smaller fraction of the SCP students, in comparison to the BRIDGE students, report they have initiated changes at school. The differences between the SCP and BRIDGE students' responses may very well reflect differences in the way that these two Programs have been implemented in the various countries. Indeed, there may be lessons to learn from the BRIDGE Program; Program structures or implementation can support and facilitate students' roles as change agents. The student online survey indicates that the BRIDGE students, in particular, feel empowered to try new things and initiate changes at school as a result of their participation in these online activities. The BRIDGE activities are centered in the regular classroom, versus an ILC, and involve the dedication of a teacher to introduce the activities. The very fact that the Program activities are communicative, student-oriented, and, in some cases, student-initiated (e.g., student selection of topics), reflects innovations in teaching pedagogy and classroom environments. This is not to say that these same structures cannot be implemented in an ILC by Program staff, but it will take focused effort on teacher training to ensure that teachers are able to integrate Program activities into their normal classroom activities.

3. Development of Skills and Knowledge

Students from both the SCP and BRIDGE Programs report that they have learned a substantial number of new computer skills and applications. Their use of and access to the Internet has also increased during their participation in these Programs. Analysis of the online survey responses

revealed that Program structure and proximity of the computer centers determine the skill sets learned and the degree to which students report improvement in a host of these skills or increased frequency of Internet use.

4. Support for English Language Instruction

Students in both Programs report noticeable improvements in their English language skills. Students corroborated what teachers said in Armenia, Lebanon, Tajikistan, and Bosnia and Herzegovina – that English language skills determine not only what students do in these Programs, but also the extent to which they are able to take full advantage of the opportunity to communicate with others who do not speak the same language. Eighty percent of the BRIDGE students believe that the English language skills developed in the Program have improved their performance in other coursework.

8

TEACHER INTERNET SURVEYS

SCP AND BRIDGE PROGRAMS

Chapter Eight

A. Introduction

An online survey of teachers participating in this regionally diverse set of Programs was a key component of the evaluation. It enables us to examine important Program activities and determine Program outcomes, as understood or experienced by those who are directly involved in the implementation in the classroom.

This chapter begins with a brief discussion of key findings on Program outcomes. It then reviews teacher activities, core teacher skills, teacher training, and presents an in-depth assessment of Program efficacy in reaching State Department and Program activities.

B. Key Findings

1) *Building Mutual Understanding and Fostering Cross-cultural Learning*

- Ninety percent or more of the BRIDGE and SCP teachers say they hold “generally favorable” or “strongly favorable” views of the American people.
- Eighty percent or more of the teachers say that joint projects with partner schools have helped them to gain a better understanding of their partner’s culture.
- Roughly half or more of the teachers indicate that their views of U.S. values, culture, and daily life have changed moderately or substantially as a result of their participation in the Program.
- Teachers who attend the Program conferences tend to interact more with people from other countries, as part of their online activities, than those who do not attend conferences.

2) *Catalyzing and Assisting Educational Reforms*

- More than 74 percent of all surveyed teachers say the support they receive from their school administration is “good” to “excellent.” Most teachers report that as a result of the Program, the administration has adopted policies that allow teachers to incorporate IT into the classroom.
- A substantial majority of the teachers feel they now have a greater understanding of using IT in the classroom, online collaborative learning principles, and PBL principles.
 - Eighty-four percent of the surveyed teachers in both Programs say they have a better understanding of how to use IT in the classroom.
 - Eighty-nine percent of SCP teachers and 94 percent of BRIDGE teachers in this survey have a better understanding of online collaborative learning principles.

- Eighty-six percent of SCP teachers and 78 percent of BRIDGE teachers in this survey believe they have a better understanding of PBL principles.
- A majority of the teachers in this online survey report that they have introduced new ideas and knowledge at work, as well as new ways of doing things.
 - Nearly 79 percent of SCP and 100 percent of BRIDGE teachers report that they have introduced new ideas and knowledge.
 - Some 72 percent of SCP and 93 percent of BRIDGE teachers say they have introduced initiatives and new ways of doing things.
 - Sixty-nine percent of SCP and 94 percent of BRIDGE teachers report that they have organized or initiated new activities or projects in the same job.
 - Roughly 75 percent of BRIDGE teachers indicate they have introduced new curricula, pedagogical methods, or educational standards, and have established new exchanges, while nearly 59 percent of SCP teachers report these changes.
- Many of the teachers in this online survey are actually applying the principles and skills that they have learned through these Programs in their classrooms.
 - Roughly half of the SCP and BRIDGE teachers surveyed report introducing the use of IT in the classroom to support instruction to a large degree.
 - Approximately 57 percent of the SCP and BRIDGE teachers say they have developed new classroom materials to a large degree.
 - A sizeable group, 42 percent of SCP and 58 percent of BRIDGE teachers, have integrated civics topics into classroom projects to a large degree.
 - While 40 percent of the SCP teachers report introducing PBL into the classroom to a large degree, the percentage is much higher (76.5%) among BRIDGE teachers who took the survey.

3) Development of Skills and Knowledge

- Computer skills are strongly associated with a wider participation across *all* online Program activities. The higher the level of confidence in computer skills, the more Program activities the teachers engage in.
 - Teachers with “excellent” or “very good” computer skills report participating in approximately five activities, whereas teachers with average computer skills only participate in approximately four; those with poor computer skills report, on average, two and a half activities.
- A majority of the teachers surveyed say that their computer skills have improved (83.7% of the SCP teachers and 69.7% of the BRIDGE teachers).
- Most of the teachers in this survey say their skills are “very good” to “excellent” (91.1% of the BRIDGE teachers and 70.3% of the SCP teachers).
- A majority (86.2%) of the SCP teachers report that their use of the Internet has increased since their involvement in the Program.

4) English Language Skills

- A majority of the teachers in the survey report that their English language skills have improved since joining the Program.

- Eighty-five percent of the surveyed BRIDGE teachers feel that the English language component of the Program has enabled them to express themselves better in online fora and discussion groups.
- English skills determine the extent to which teachers interact with others from different countries. Generally, teachers who are comfortable and confident in English interact more with others from different countries than those who express less confidence in their English skills.

5) Multiplier Effect of English Language

- Roughly half of the surveyed BRIDGE teachers feel that the Program has had a large impact on improving English language teaching in their schools.
- Almost all of the BRIDGE teachers (92%) have adopted English language resources from the Internet.
- Close to 70 percent of the BRIDGE teachers surveyed have integrated English language materials into classes in other subject areas.
- Approximately 67 percent of the surveyed BRIDGE teachers have updated English language curricula while 56 percent have developed and piloted new English language curricula.
- There is a significant multiplier effect here, as well, as almost 50 percent of the teachers in the survey have shared new English language curricula and materials with teachers in other schools.
- Teachers have noticed that just providing access to the Internet has added the benefit of increasing students' motivation to learn English. Over 90 percent of the teachers surveyed in *both* Programs indicated that access to the Internet has had a "large impact" or "some impact" on their students' motivation to learn English.

6) Program Satisfaction

- Teachers in the survey are very satisfied with the Program in terms of Program administration, Program content, variety of experiences, and relevance to professional education and development. Between 87 and 91 percent are either "very satisfied" or "satisfied" with each of these Program elements.

1. Who Responded to the Survey: Teacher Characteristics

The sample sizes for SCP and BRIDGE teachers who elected to fill out the online survey are not particularly large; however, there are sufficient numbers of respondents to provide a useful analysis of important Program characteristics and outcomes. Teachers in these two samples are relatively similar: they are in their early to mid-thirties, on average, and have approximately 8 to 10 years of teaching experience, and about one and a half years of experience in the Program. As expected, there are more female teachers than males in this sample; men represent roughly 30 percent of the respondents in both the SCP and BRIDGE sample. The largest numbers of teacher respondents reside in Armenia, Tajikistan, Uzbekistan, and Pakistan (see Table 8.1), similar to the student Internet surveys. However, there is wider representation across countries; teachers in Serbia and Montenegro, and Jordan participated. There are fewer teachers in the Internet survey than students, so some care is needed in terms of generalization. However, the responses of these teachers do allow for a good analysis of their perceptions and activities.

TABLE 8.1 Countries Where Teachers Live		
Country	Number in Sample	Percent of Total
SCP		
Albania	7	3.2
Armenia	101	46.1
Bosnia and Herzegovina	8	3.7
Tajikistan	31	14.2
Uzbekistan	50	22.8
Croatia	8	3.7
Macedonia	12	5.5
Serbia-Montenegro	2	0.9
<i>SCP Total</i>	<i>219</i>	<i>100.0</i>
BRIDGE		
Jordan	1	2.9
Lebanon	9	26.5
Morocco	5	14.7
Pakistan	19	55.9
<i>BRIDGE Total</i>	<i>35</i>	<i>100.0</i>

Social studies, history, English and literature, and computer science represent the largest groups of teachers. Given the nature of the SCP and BRIDGE Programs, it is not surprising to see that computer science teachers outnumbered the others in responding to the online survey. *This does not imply that they outnumber all other teachers in the individual country Programs. There are more English teachers in the BRIDGE sample than in the SCP sample.* Again, this may reflect the focus of the BRIDGE Program on English language instruction. It is important to keep the four groups of teachers in mind, because the survey specifically addresses IT applications, and the development and use of computer and English language skills.

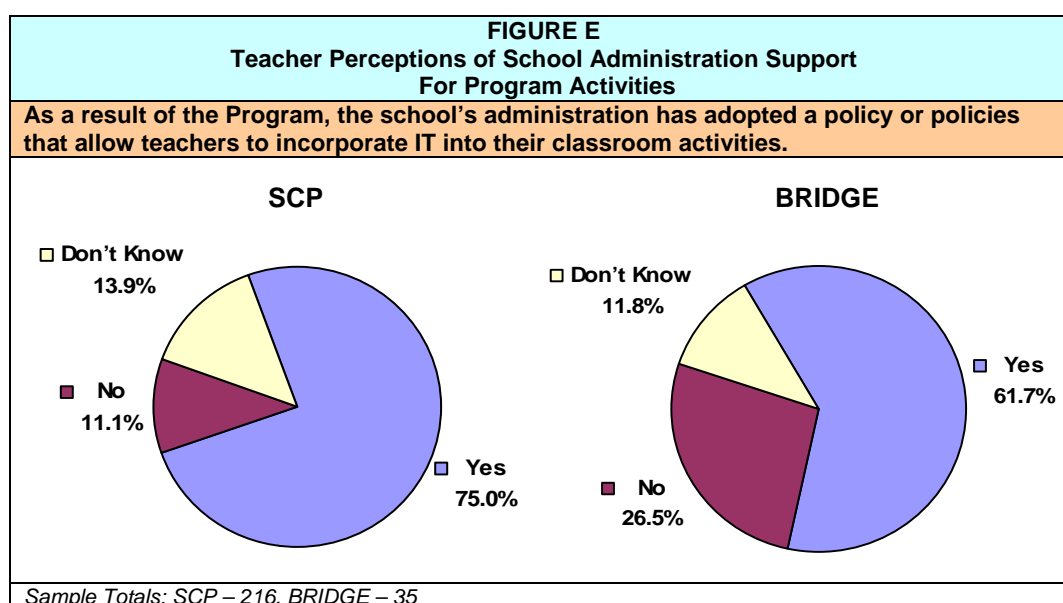
In both the SCP and BRIDGE surveys, teachers indicated that they teach “other” subjects not listed on the survey. The “other” subjects ran the gamut of disciplines; this demonstrates the reach of the Program and its attractiveness to teachers in many areas. Other subjects taught by SCP teachers include: chemistry, law, Russian, German, French, economics, physics, history of the Armenian Apostolic Church, human rights, geography, and living skills. Some of the other subjects taught by BRIDGE teachers include: Pakistan studies, Islamic studies, economics, psychology, journalism, and language and communication.

2. Where and When Program Activities Occur and School Administration Support

In general, the SCP and BRIDGE teachers responded similarly when assessing overall school administration support for Program activities. More than 74 percent of all teachers rated school administration support as “good” to “excellent.” In addition, a majority (75% in SCP and roughly 62% in BRIDGE) of the teachers indicate that, as a result of the Program, the school’s administration has adopted policies that allow teachers to incorporate IT into their classroom activities. This is a major objective of both the SCP and BRIDGE Programs.

TABLE 8.2 Teacher Perceptions of School Administration Support For Program Activities		
	SCP (%)	BRIDGE (%)
Level of overall support that the school's administration has provided for SCP/BRIDGE activities.		
Excellent	45.2	45.7
Very Good	34.7	28.6
OK	16.0	17.1
Not Very Good	2.3	2.9
Poor	0.9	5.7
Don't Know	0.9	0.0
<i>Sample Totals*</i>	219	35
<i>* In a small sample size the difference of one person can produce seemingly higher percentage figures – e.g., the BRIDGE sample of 1 person who rates administrative support as not very good versus two people who indicate it is poor.</i>		

This support is critical, given that most of the surveyed teachers (94% of the SCP teachers and roughly 88% of the BRIDGE teachers) engage in Program activities at the school where they teach (see Figure E).



The BRIDGE teachers do seem to have more options, in terms of access to the Internet, than their SCP colleagues. Nine percent of the BRIDGE teachers in this sample indicate that they frequently use facilities other than a school to participate in Program activities (e.g., either at home or at an Internet café). Several of the BRIDGE teachers in Lebanon told Aguirre evaluators that they used their computers at home to perform many of the duties or tasks necessary for the Program.³⁸

³⁸ A majority of the SCP teachers rated the quality of the Internet connection as excellent or very good (57%). Significantly fewer of the BRIDGE teachers held their connections in the same esteem: 29.4 percent rated it as excellent or very good. This may have more to do with perceptions and expectations than actual conditions. The Aguirre evaluation team noticed, in general, that the Internet connections, both in the schools as well as in Internet

Most surveyed SCP teachers engage in Program activities outside of normal school hours (i.e., before or after school), whereas the BRIDGE teachers indicate that they participate in activities during normal school hours. As discussed earlier, this may be due to several factors: 1) access to a computer facility at the school; 2) better integration of the BRIDGE Program activities into regular course work; or 3) the fact that some of the SCP centers are staffed by Program staff and not teachers (this is the case in Armenia and Tajikistan).

3. Teacher Activities

Teachers were asked to indicate which activities they administered, and/or participated in, as part of the SCP and BRIDGE Programs. Responses to these questions are shown in Table 8.3.

TABLE 8.3 Percent of Teachers who Report Administering or Participating in Program Activities		
Activities	SCP (%)	BRIDGE (%)
Online fora	76.6	88.6
Website development	61.8	48.6
Online projects	71.9	94.3
Online classes/courses	59.6	77.1
Special presentations	70.9	62.9
Research projects w/ students	74.6	88.6
Research projects w/ other teachers	66.0	74.3
Own research project	69.1	85.7
Attend national, regional and/or international conference as part of Program	40.6	52.9
<i>Sample Totals*</i>	219	35
<i>* SCP sample ranged from 203 to 210 teachers on the online activities and 219 on the conference question; BRIDGE sample was 35 teachers for the online activities and 34 for the conference question.</i>		

A significant majority of the teachers surveyed indicate that they participate in or administer online fora, online projects, online classes/courses, and special presentations. Most teachers in both Programs participate in individual research projects, as well as research projects with students and other teachers.

Teacher responses are largely consistent with student responses from the online survey (see Chapter 7). A relatively high percentage of surveyed SCP teachers report participation across all of the activities (between 60 and 76%). The BRIDGE teachers surveyed reveal a more uneven pattern of participation (approximately 47% in website development, compared to 94% in online projects). This may not be the case across the BRIDGE Program, but rather this small group of teachers who took the online survey.³⁹

cafes, are much more reliable and faster in Lebanon than in Armenia or Bosnia, for example. It may be that students and teachers alike in Lebanon have higher expectations of what constitutes a “good connection.”

³⁹ One interesting point to note is that this *pattern* in the data is consistent with the larger student samples (SCP=661 and BRIDGE=101) as well, where higher percentages of SCP students indicate participation across the different online activities than the BRIDGE students. This may indicate structural differences in the focus of the online activities across the two programs.

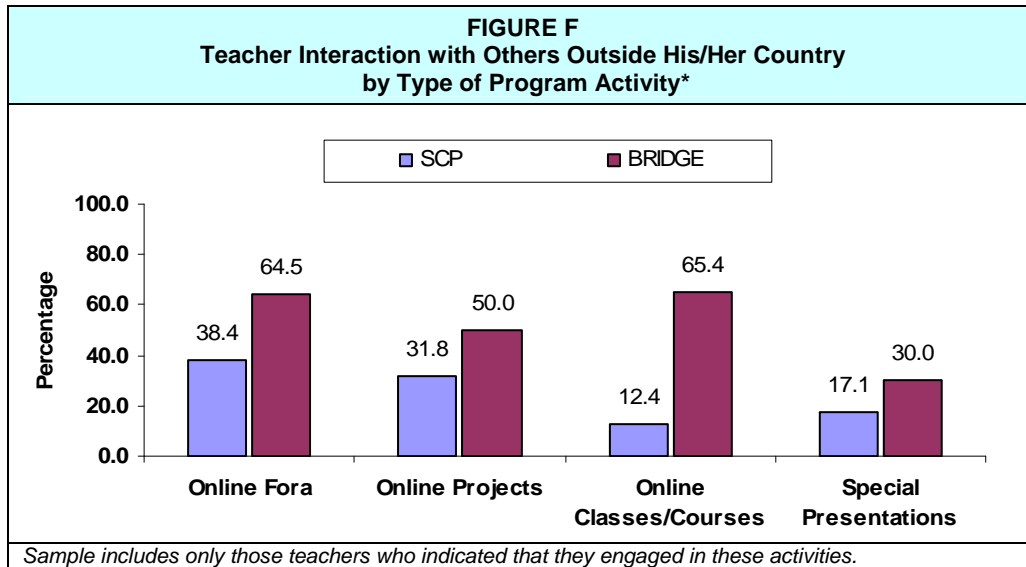
4. Locus of Activity

An overwhelming majority of SCP teachers' reported interactions occur with others inside the same country (see Table 8.4). However, the two most frequent activities (online fora and online projects) that involve contacts outside the teachers' home countries, do allow for considerable interaction with external contacts.

TABLE 8.4 Teacher Interaction with Others				
Activities	SCP (%)*		BRIDGE (%)*	
	Inside Country	Outside Country	Inside Country	Outside Country
Online fora	61.6	38.4	35.5	64.5
Website development	84.4	15.6	38.5	61.5
Online projects	68.2	31.8	50.0	50.0
Online classes/courses	87.6	12.4	34.6	65.4
Special presentations	82.9	17.1	70.0	30.0
Research projects w/other students	86.9	13.1	73.3	26.7
Research projects w/ teachers	76.9	23.1	83.3	16.7
Own research projects	92.2	7.8	88.5	11.5

*Sample includes only those teachers who indicated that they engaged in these activities.

Across the two Programs, higher percentages of teachers report interacting with others from different countries when engaged in online fora and online projects. A significant percentage of the BRIDGE teachers surveyed also interact with people from different countries when they participate in online courses and special presentations (see Figure F).



Similarly, if we examine the data for those teachers who reported interaction with people locally in the same country, we see a similar pattern. Basically, the majority of the SCP teachers who interact locally report that they interact with others from the same school across most of the activities. A substantial percentage of the SCP teachers surveyed do interact with people outside

of their schools in the course of certain activities: online fora, online projects, and online classes/courses. A higher percentage of the BRIDGE teachers, again, report that they do interact with others outside their school when they engage in online fora, online projects, research projects with teachers, special presentations, and online classes and courses.

TABLE 8.5 Teacher Interaction Locally in Same Country				
Activities	SCP (%)*		BRIDGE (%)*	
	Inside School	Outside School	Inside School	Outside School
Online fora	64.4	35.6	54.5	45.5
Website development	85.2	14.8	100.0	0.0
Online projects	62.1	37.9	68.8	31.3
Online classes/courses	69.8	30.2	71.4	28.6
Special presentations	80.2	19.8	57.1	42.9
Research projects w/other students	88.0	12.0	90.4	9.1
Research projects w/ teachers	77.7	22.3	60.0	40.0
Own research projects	91.5	8.5	82.6	17.4
* Sample includes only those teachers who indicated that they engaged in these activities with others inside their own country. Sample for BRIDGE breakdown is quite small in some cases so the percentage figures seem unusually large (e.g. n=5 for website development in the country so the 100% reflects five teachers). Percentage is listed only to allow an easy comparison to the SCP numbers in terms of the patterns of the distributions.				

It is worth exploring whether participation in any of the national, regional or international Program conferences is associated with more interaction on the part of the teachers, outside of one's immediate environment. Teachers who attend conferences tend to interact more often with people from other countries in the online fora and projects than those who do not attend conferences. The same holds true within a country: teachers who attend conferences are more likely to interact with people from different schools than those teachers who do not attend.⁴⁰

Responses from SCP teachers indicate that teachers who rate their English as “very good” to “excellent” are indeed more likely to attend conferences. Those who rate their command of English as “poor” to “average” are less likely to do so. *Like the students in the survey, teachers who are not comfortable with English find that their poor command of the language limits the extent to which they can interact with others from different countries.*

5. Teacher Skills: Computer and English Language

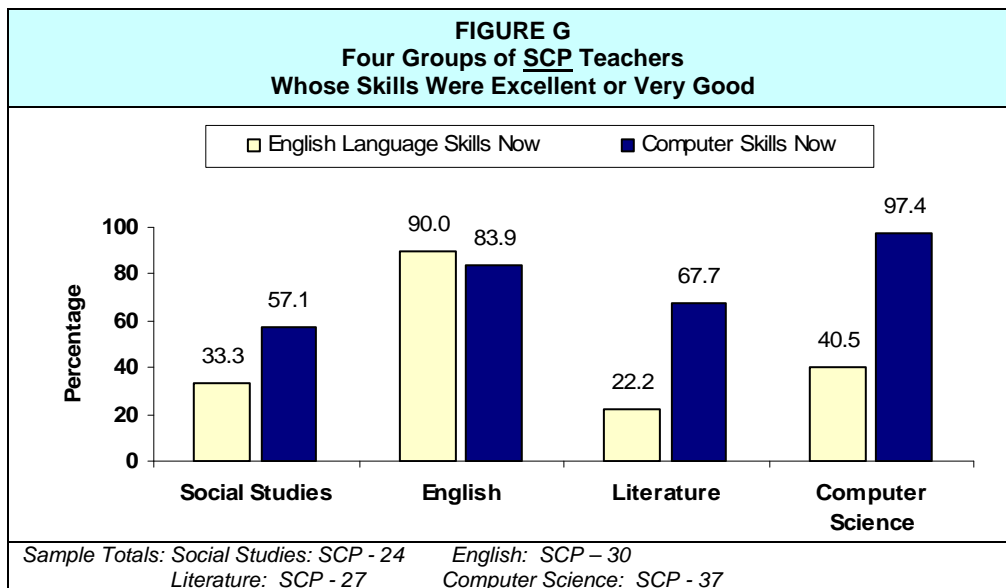
The online survey collected information on teacher self-assessment of their computer and English language skills. Responses for four groups of SCP teachers (social studies, English, literature, and computer science) are shown in Table 8.6.

⁴⁰ Data are not shown but teacher responses were analyzed.

TABLE 8.6 English and Computer Skills of Four Groups of SCP Teachers				
Subject Taught	English Language Skills Now (%)			Sample Totals * (n)
	Excellent/Very Good	Average	Not Very Good/Poor	
Social Studies	33.3	37.5	25.0	24
English	90.0	6.7	3.3	30
Literature	22.2	29.6	44.4	27
Computer Science	40.5	29.7	27.0	37
Subject Taught	Computer Skills Now (%)			Sample Totals * (n)
	Excellent/Very Good	Average	Not Very Good/Poor	
Social Studies	57.1	40.0	2.9	35
English	83.9	16.1	0.0	31
Literature	67.7	32.3	0.0	31
Computer Science	97.4	0.0	2.6	39

**Sample totals vary from sample of all teachers due to missing data on these indicators.*

The online survey reveals that groups of teachers differ widely in terms of their skills and confidence, both in English as well as computer skills. As a group, social studies and literature teachers are less confident in their English language skills than are English teachers or computer science teachers (only 33% of social studies teachers and 22% of literature teachers believe their English is “very good” to “excellent,” compared to 90% of English teachers and 40% of computer science teachers). This may not be surprising if they are generally teaching the subjects of social studies and literature in their own languages. Social studies teachers, as a group, are less confident in their computer skills than any of the other groups; however, a majority (57%) of the social studies teachers, as well as the literature teachers (67.7%), rate their computer skills as “excellent” to “very good.” A very large majority (84% to 97%) of the English and computer science teachers rate their computer skills as “excellent” to “very good.” The results are shown in Figure G.



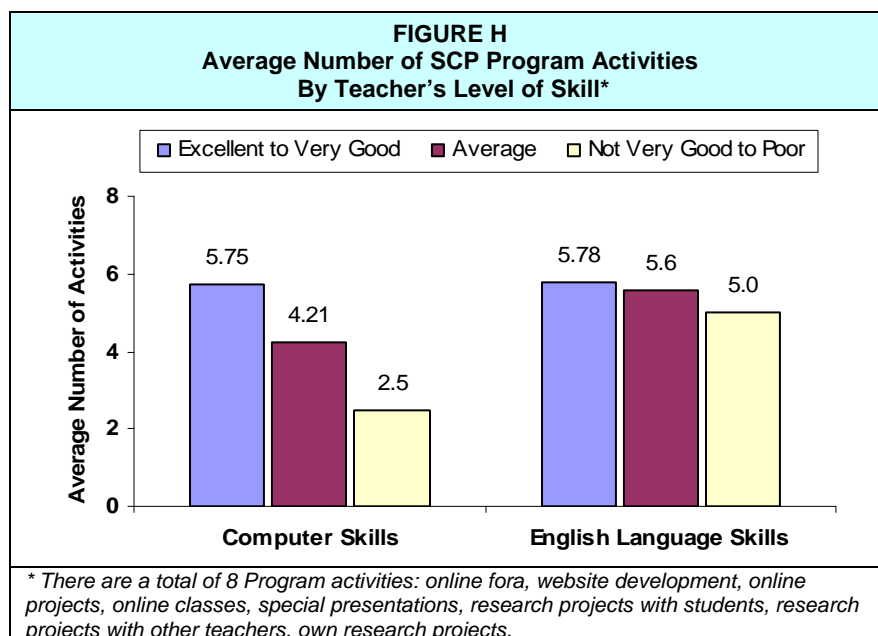
While the number of BRIDGE teachers who responded to the online survey was very small, it is possible to get a sense of their assessment of computer and English language skills. Results for four groups of teachers (social studies, English, literature, and computer science) are shown in Table 8.7.

TABLE 8.7 English and Computer Skills of Four Groups of <u>BRIDGE</u> Teachers				
Subject Taught	English Language Skills Now (%)			Sample Totals * (n)
	Excellent/ Very Good	Average	Not Very Good/ Poor	
Social Studies	66.7	33.3	0.0	8
English	92.3	7.7	0.0	18
Literature	50.0	50.0	0.0	2*
Computer Science	77.8	22.2	0.0	12
Subject Taught	Computer Skills Now (%)			Sample Totals * (n)
	Excellent/ Very Good	Average	Not Very Good/ Poor	
Social Studies	100.0	0.0	0.0	8
English	88.9	5.6	5.6	18
Literature	100.0	0.0	0.0	3*
Computer Science	100.0	0.0	0.0	12
* The sample size for the BRIDGE teachers is very small and percentages should be interpreted with caution. Results are illustrative only.				

Similar to SCP, the BRIDGE English (92.3%) and computer science teachers (77.8%) are more confident of their English language skills than are literature or social studies teachers.⁴¹ None of the BRIDGE teachers surveyed rated their English language skills as “not very good” or “poor.” This is not surprising, since iEARN explicitly sought out teachers who had the required level of English language skills to participate in the online fora, where English was the language of choice. Interestingly, with the exception of the English teachers (though still 88.9%), all the BRIDGE teachers surveyed feel very confident about their computer skills.

So, is one skill set more important than the others in terms of teacher engagement across the different Program activities? Figure H presents the *average* number of Program activities of SCP teachers based on their self-reported proficiency level for English and computers.

⁴¹ Caution is necessary, since there are so few literature and social studies teachers in this online survey.



Regardless of their English language skill level, teachers report administering to, or participating in, about the same number of activities (five of the eight). However, teachers who report higher levels of computer skills engage in more activities than teachers with lower levels of computer skills. The number of Program activities decreases with declining computer skill levels: teachers with excellent/very good computer skills report participating in approximately five activities, whereas teachers with average computer skills only participate in approximately four; those with poor computer skills report two and a half.

It appears that computer skills, not English language skills, are the limiting factor for teacher engagement across the different activities, as compared to students, for whom English proficiency level was a determining factor. Teachers also mentioned this barrier in focus groups in Armenia and Lebanon. They cited key factors that seem to account for lower computer skill levels: teacher age (the pre-computer generation), limited exposure to computers prior to the Program, limited access and Internet penetration, and lack of hardware. Given the Program goal of building technical knowledge and the adaptability of each of the Programs, this is one area that can be easily addressed, over time, with focused effort.

6. Topics of Discussion

Teachers were asked to indicate the topics of discussion during their main Program activities. Topics most listed by the teachers are “culture, religion, and history,” “education,” and “information and communication technologies.” BRIDGE teachers also indicate that “environment/natural resources” is a widely discussed topic. In focus groups, the BRIDGE teachers in Lebanon repeatedly talked about the environment projects involved in the YouthCaN activities and conferences implemented by iEARN. In addition, 38 percent of the SCP teachers and about one-quarter of the BRIDGE teachers indicate that “local community issues” are topics of Program activities. “English” is also a common topic for the BRIDGE teachers. Although no more than 10.7 percent of the SCP teachers indicate that “conflict resolution” is a topic of main

Program activities, 21.9 percent do mention “international and current events.” This may include issues related to conflicts in these regions (see Table 8.8)

TABLE 8.8 Teacher Reported Program Topics of Discussions		
Discussion Topics	SCP (%)	BRIDGE (%)
Local community issues/government	38.1	26.5
Culture, religion, history	52.6	61.8
International or current events	21.9	17.6
Ethnic and race relations	7.4	11.8
Conflict resolution	10.7	14.7
Education	72.6	73.5
Environment/natural resources	22.3	47.1
Popular culture	15.8	2.9
American studies, holidays	12.1	0.0
English	16.7	32.4
Health	13.0	5.9
Issues affecting vulnerable groups	10.7	5.9
Gender issues	11.6	0.0
Ethics	14.0	5.9
Information and communication technologies	37.2	44.1
<i>Sample Totals</i>	219	35
Who Selects Majority of Topics*	SCP (%)	BRIDGE (%)
Students	25.6	38.2
Teacher	42.8	50.0
Program Administrator/Coordinator	30.2	5.9
<i>* Percentages do not total exactly to 100% due to a small number of missing cases and “other.”</i>		

Similar to the student survey, a sizeable percentage (30%) of the SCP teachers indicate that the topics of discussion are chosen by the Program administrators – this is not the case in the BRIDGE sample. The grassroots approach of the BRIDGE Program, as implemented by iEARN, ensures that teachers (and students) will take ownership of many of the online fora and even propose new fora. This contributes to capacity building and sustainability of the Program in the long run.

7. Teacher Training

A majority of SCP teachers (83.5%) and BRIDGE teachers (91.2%) rate the quality of the training they received as “excellent” or “very good.” None of the teachers rated their training as “not very good” or “poor.” Teachers received training in the following areas:

- Using IT in the classroom to support instruction;
- Introducing online collaborative learning activities to students;
- Introducing PBL into the classroom;
- Designing courses using the Internet;
- Developing new classroom materials;
- Using the Internet to introduce cross-cultural learning activities;
- Integrating civics topics into classroom projects; and
- Applying interpersonal communication techniques.

C. Program Outcomes

Survey data is examined to assess Program impact on the following objectives and outcomes: mutual understanding, educational reforms, computer skills, and English language skills.

1. Mutual Understanding

Teachers were initially asked to assess their knowledge of U.S. culture or society, and the extent to which project activities helped them gain a better understanding of these subjects. Eighty percent or more of the teachers affirmed that joint projects with the partner schools had indeed helped them to gain a better understanding of their partner's culture to a "large extent" or to "some extent." Even more so, 90 percent or more of BRIDGE and SCP teachers say they hold "generally favorable" or "strongly favorable" views of the American people (see Table 8.9).

TABLE 8.9 Mutual Understanding and Teacher Reflections on the United States		
	SCP (%)	BRIDGE (%)
To what extent have the joint projects w/partner schools helped you gain a better understanding of your partner's culture or society?		
To a Large Extent	40.5	42.3
To Some Extent	45.4	38.5
To a Small Extent	4.9	3.8
Not At All	1.1	3.8
Not Applicable	8.1	11.5
<i>Sample Totals</i>	185	26
How do you view the American people?		
Strongly Favorable	38.8	44.4
Generally Favorable	51.9	48.1
Neither Favorable nor Unfavorable	8.7	3.7
Generally Unfavorable	0.0	0.0
Strongly Unfavorable	0.5	3.7
<i>Sample Totals</i>	183	27

Teachers were also asked to assess the *changes* in their understanding of U.S. culture and values, as well as daily life in the United States, as a result of their participation in the Program. Roughly 60 percent or more of the teachers indicate that their understanding or views have changed either moderately or substantially as a result of their participation (see Table 8.10).

TABLE 8.10 Changes in Teacher Understanding of U.S. Culture, Values, and Daily Life		
	SCP (%)	BRIDGE (%)
How much did participation in the Program change your understanding of U.S. values and culture?		
No Change	14.9	23.1
Minimal Change	23.2	19.2
Moderate Change	43.6	23.1
Substantial Change	18.2	34.6
<i>Sample Totals</i>	181	26
How much did participation in the Program change your understanding of daily life in the United States?		
No Change	14.4	32.0
Minimal Change	25.0	16.0
Moderate Change	33.3	24.0
Substantial Change	27.2	28.0
<i>Sample Totals</i>	180	25

2. Educational Reform

A primary goal of the SCP and BRIDGE Programs is to catalyze and assist educational reforms by integrating PBL, collaborative learning, and IT into the curriculum. When asked what they have actually learned as a result of their participation in these Programs, a vast majority of the teachers (78% to 94%) feel that they now have a greater understanding of: 1) using IT in the classroom (84% in both Programs); 2) online collaborative learning principles (89% of SCP teachers and 94% of BRIDGE teachers); and 3) PBL principles (86% of SCP teachers and 78% of BRIDGE teachers) (see Table 8.11). In other words, almost all of the teachers have increased their knowledge and understanding of the subjects at the heart of educational reform, and so have achieved the primary objectives of these Programs.

TABLE 8.11 Teacher Reported Changes in Knowledge		
	SCP (%)	BRIDGE (%)
Using Information Technology in the Classroom		
Increased knowledge or understanding	84.8	84.9
<i>Sample Totals</i>	211	33
Online Collaborative Learning Principles		
Increased knowledge or understanding	89.0	94.1
<i>Sample Totals</i>	209	34
Project-based Learning Principles		
Increased knowledge or understanding	86.6	78.7
<i>Sample Totals</i>	210	33

Teachers were asked whether or not they had initiated changes at work, using the knowledge or experience gained during the Program. Across the board and across both Programs, teachers state that they have indeed initiated educational reforms in the classroom by applying the knowledge and/or experience gained through the SCP and BRIDGE Programs.

TABLE 8.12 Teacher Reported: Initiation of Change at Work		
Reported activity	SCP (%)	BRIDGE (%)
Introduced new ideas and knowledge	78.7	100.0
Introduced initiatives, new ways of doing things	72.2	93.3
Introduced new curricula, pedagogical methods, or educational standards	58.9	72.4
Established new exchanges	41.1	76.7
Introduced new policies or procedures	26.6	53.3
Organized or initiated new activities or projects in the same job	69.0	94.3
<i>Note: BRIDGE sample is 29-35 cases, depending on indicators. SCP samples between 192-210, depending upon the indicator.</i>		

Large percentages of teachers in both Programs report that they have: 1) introduced new ideas and knowledge (79% of SCP and 100% of BRIDGE teachers); 2) introduced initiatives, new ways of doing things (72% of SCP and 93% of BRIDGE); and 3) organized or initiated new activities or projects in the same job (69% of SCP and 94% of BRIDGE) (see Table 8.12). Roughly three-quarters of the BRIDGE teachers indicate they have introduced new curricula, pedagogical methods, or educational standards, and have established new exchanges. Nearly 59 percent of the SCP teachers report that they have also introduced new curricula, pedagogical methods, or educational standards.

Almost all of the teachers are experimenting with new ways of applying the principles and skills that they have learned through their participation in the Program – integrating IT into the classroom, introducing online collaborative learning and PBL activities, using the Internet to design courses and cross-cultural learning activities and to support instruction in specific subjects.

TABLE 8.13 Teacher Applications of Training in the Classroom				
Application of Training	SCP* (%)		BRIDGE** (%)	
	To a Large Degree	To Some Degree	To a Large Degree	To Some Degree
Use information technology in the classroom to support instruction	49.3	40.8	50.0	32.4
Introduce online collaborative learning activities to my students	37.4	37.4	70.6	26.5
Introduce project-based learning into the classroom (online and offline)	40.3	39.8	76.5	17.6
Design courses using the Internet	47.2	40.1	32.4	23.5
Develop new classroom materials	57.0	32.6	57.6	30.3
Use the Internet to introduce cross-cultural learning activities	55.6	32.7	14.7	5.9
Integrate civics topics into classroom projects	42.4	29.7	57.6	27.3
* The number of SCP respondents for these questions ranged from 102 to 185.				
** Thirty-four BRIDGE teachers responded to these questions.				

A sizeable fraction (37% percent or more of the SCP teachers and 32.4% or more of the BRIDGE teachers) of the teachers feel that they have been able to apply the training they received in the classroom to a large degree (see Table 8.13). The one exception is use of the Internet to introduce cross-cultural learning activities; only 15 percent of BRIDGE teachers feel that they have been able to accomplish this to a large degree. If we combine the responses for “to a large degree” and “to some degree,” it becomes apparent that most of the teachers feel confident that they have been able to apply their training across all the different applications (with the exception of the BRIDGE teachers in using the Internet for cross-cultural learning activities).

3. Computer Skills

The majority of teachers in both Programs report that their computer skills have improved since their involvement in the Program (84% in SCP and nearly 70% in BRIDGE). The computer applications that most of the SCP teachers report learning are: Internet research, e-mail, word processing, online discussions, and PowerPoint (see Table 8.14). The pattern is slightly different with the BRIDGE sample. The applications that more BRIDGE teachers report learning are: online discussions, Internet research, PowerPoint, and e-mail.

TABLE 8.14		
Teacher Computer Skills and Reported Improvement		
	SCP (%)	BRIDGE (%)
Computer Applications and Skills Learned		
Internet Research	84.7	55.9
E-mail	87.0	47.1
Word Processing and Spreadsheets	77.3	32.4
Online Discussions	69.9	85.3
PowerPoint	59.7	48.5
Website Development	34.7	21.2
<i>Sample Totals</i>	219	35
Computer Skills Improvement		
Teachers report computer skills improved	83.7	69.7
<i>Sample Totals *</i>	171	33
Teacher Assessment of Computer Skills		
Excellent	30.1	38.2
Very Good	40.2	52.9
OK	27.3	5.9
Not Very Good	1.0	2.9
Poor	1.0	0.0
Don't Know	0.5	0.0
<i>Sample Totals *</i>	209	34
<i>*Note: Sample size varies due to missing values on one or more of the Questions which made it impossible to calculate a change (before/after).</i>		

A majority of the teachers rate their computer skills to be “very good” or “excellent” (91% of the BRIDGE teachers and 70% of the SCP teachers). About one-quarter of SCP teachers feel that their computer skills are “okay,” a good portion of which are Armenian. It may be that their foundational skills were lower. In fact, all the teachers who report “okay” computer skills now also report that, prior to the SCP Program, their computer skills were “poor” to “not very good.”

Therefore, the sizeable number of teachers with “average” computer skills is a reflection of considerable, positive Program impact in terms of skills development.

Finally, 86 percent of the SCP teachers report that their use of the Internet has increased since their involvement in the Program. The figure for the BRIDGE teachers is smaller (58%), but nonetheless demonstrates that a majority of these teachers have increased their use of the Internet since beginning their participation. Roughly three-quarters of the teachers (73% to 77%) access the Internet every day (see Table 8.15). Another 20 percent of SCP teachers and 16 percent of BRIDGE teachers access the Internet on a weekly basis. Clearly, participation in the Program has not only provided a mechanism for the teachers to gain access to the Internet, but has also been a catalyst for their increased use.

TABLE 8.15 Teacher Internet Use		
	SCP (%)	BRIDGE (%)
Frequency of Internet Use Now		
Daily	73.3	77.4
Weekly	20.9	16.1
Monthly	4.9	3.2
Hardly Ever/Never	1.0	3.2
<i>Sample Totals</i>	206	31
Change in Frequency		
Teachers report increase in Internet use/access	86.2	58.1
<i>Sample Totals</i>	203	31

4. English Language Skills

A majority of SCP/BRIDGE teachers report that their English language skills have improved significantly since their involvement in the Program (nearly 58% of the SCP teachers and 64% of BRIDGE teachers). The BRIDGE teachers in this survey are more confident of their English skills than the teachers in the SCP countries: 100 percent of the BRIDGE teachers rate their English as “average” or above; 78.5 percent rate it as “very good” to “excellent” (see Table 8.16). A solid 70 percent of the SCP teachers rate their English skills as “average” or above. Almost 40 percent rate their skills as “very good” to “excellent.” This is not surprising, given the BRIDGE Program’s emphasis on English language instruction and its prevalence in Program activities, materials, and fora. English language skill level also played a factor in BRIDGE teacher selection.

TABLE 8.16 English Language Skills and Improvements		
	SCP (%)	BRIDGE (%)
English Language Skills Improvement		
Teachers report English language skills improved	57.9	64.3
<i>Sample Totals</i>	157	28

	SCP (%)	BRIDGE (%)
Teacher Assessment of English Language Skills		
Excellent	15.3	32.1
Very Good	21.9	46.4
Average	32.8	21.4
Not Very Good	19.7	0.0
Poor	6.6	0.0
Don't Know	3.8	0.0
<i>Sample Totals</i>	183	28

One of the goals of the BRIDGE Program is to provide a mechanism for English language teaching. Most teachers confirm the Program has had a very significant impact on improving English language training at their schools. About half of the teachers indicate that there is a large impact; another 30 percent indicate that there is some impact (see Table 8.17). Many of these BRIDGE teachers are applying newly-learned pedagogies and methods as they develop innovative approaches to teaching English, build their schools' capacity for English language instruction, and help students to strengthen their English language skills.

The BRIDGE teachers reported innovations in four critical English language teaching activities. Almost all of the teachers (92%) have adopted English language resources from the Internet. Some 69 percent have integrated English language materials into the teaching of other subjects; 67 percent say they have updated English language curricula, while 56 percent have developed and piloted new English language curricula. There is a *significant multiplier effect* here, as well, as almost 50 percent of the teachers have shared new English language curricula and materials with teachers in other schools. BRIDGE teachers have enthusiastically marshaled their new skill sets, combining new pedagogies and approaches to classroom teaching with a better understanding of the Internet as a vital source of English language resources, to the benefit of their schools and students.

TABLE 8.17		
Multiplier Effect of English Language Skills in BRIDGE Program		
How much impact has BRIDGE had on Improving English Language Training in your School?		
	Number	Percent of Total
Large Impact	14	51.9
Some Impact	11	31.4
Small Impact	2	5.7
<i>Sample Total</i>	27	100.0
Reported changes in English language teaching since participating in BRIDGE.		
	Number	Percent of Total*
Develop and pilot new English-language curricula	14	56.0
Update English language curricula	16	66.7
Integrate English-language materials/curricula into teaching of other subjects	18	69.2
Adopt English-language resources found on the Internet	23	92.0
Have you shared any new English language curricula/ materials that you have developed with teachers in other schools?	12	48.0
* Sample size varies slightly for each indicator based on the number of missing values.		

Indeed, over 90 percent of the teachers in *both* Programs (92% in SCP and 96% in BRIDGE) indicated that access to the Internet has had a “large impact” or “some impact” on their students’ motivation to learn English. In other words, teachers have noticed that just providing access to the Internet has the benefit of increasing students’ motivation to learn English. Finally, all of the BRIDGE teachers believe that the English language component of the Program has enabled them to express themselves better on the BRIDGE Program online fora (86% to a large extent and 14% to some extent) (see Table 8.18). They have also been able to participate in other discussions in the “public spaces” afforded by the Internet. This development goes hand-in-hand with the large number of BRIDGE teachers whose English has improved as a result of the Program (64.3%). The Program is highly effective in providing teachers with the English language skills and self-confidence necessary to express themselves in virtual spaces where English is the *lingua franca*.

TABLE 8.18 Multiplier Effect of English Language on Online Communication in BRIDGE Program		
To what extent has English language component of BRIDGE allowed you to better express yourself in the fora?		
	Number	Percent
Large Extent	24	85.7
Some Extent	4	14.3
<i>Sample Total</i>	28	100.0

5. Teacher Satisfaction with Program

Teachers are very satisfied with all aspects of the SCP and BRIDGE Programs: administration, content, variety of experiences, and relevance to professional education and development. Between 87 and 91 percent are either “very satisfied” or “satisfied” with each of these Program elements (see Table 8.19). In particular, larger percentages of BRIDGE teachers relate high levels of satisfaction with Program administration, variety of experiences, and relevance.

TABLE 8.19 Teacher Satisfaction with the Program		
Elements of the Program	SCP (%)	BRIDGE (%)
Program Administration		
Very Satisfied	42.9	60.0
Satisfied	46.5	28.6
Neutral	7.8	8.6
Dissatisfied	2.3	0.0
Very Dissatisfied	0.5	2.9
<i>Sample Totals</i>	217	35
Program Content		
Very Satisfied	39.0	45.7
Satisfied	52.1	42.9
Neutral	8.5	8.6
Dissatisfied	0.5	2.9
Very Dissatisfied	0.0	0.0
<i>Sample Totals</i>	213	35

Elements of the Program	SCP (%)	BRIDGE (%)
Variety of Experiences		
Very Satisfied	42.7	68.6
Satisfied	47.4	28.6
Neutral	9.0	0.0
Dissatisfied	0.9	2.9
Very Dissatisfied	0.0	0.0
<i>Sample Totals</i>	211	35
Relevance to professional/educational development		
Very Satisfied	44.8	71.4
Satisfied	46.7	20.0
Neutral	6.6	5.7
Dissatisfied	1.9	2.9
Very Dissatisfied	0.0	0.0
<i>Sample Totals</i>	212	35
<i>Note: Sample size varies in SCP breakdown due to a small number of missing values.</i>		

D. Summary Observations

Although the online survey data is not representative of all country Programs, it does provide a useful and clear reflection of the overall effectiveness of these Programs in achieving their stated goals. Teacher responses reveal that both the SCP and BRIDGE Programs have been successful in terms of building teacher capacity, as well as achieving major Program goals.

1. Building Mutual Understanding and Fostering Cross-cultural Learning

In terms of mutual understanding, a majority of the teachers report that participation in the Program has given them a better understanding of, and more insight into, U.S. values, culture, society, and daily life. This has been the case no matter how much or how little they knew previously. Most teachers express very positive and favorable views of the American people.

In addition, joint projects across national boundaries appear to be a very effective way of enhancing mutual understanding. Eighty percent or more of the teachers say that joint projects with partner schools have helped them to gain a better understanding of the culture in these countries. Since many of the online projects do not solely address differences or similarities in culture, it seems that a natural outcome of working together on something concrete, such as a joint project, leads to the sharing of information beyond the boundaries of this online activity. This may enhance sentiments of mutual understanding among the participants, as they exchange more personal or cultural information. Indeed, many of the forum topics cover a wide range of issues beyond just culture (community issues, current events, education, environment, etc.). The breadth in topics and interest areas across the online discussions in these Programs allows for a greater dissemination of information in many fields and potentially expanded reach. This is one of the strengths of virtual exchanges, since they enable participants to construct meaningful interchange with others according to their own interests, initiatives, and time constraints.

2. Catalyzing and Assisting Educational Reforms

Most of the teachers report that they have been able to apply what they learned or experienced during the Program in their classrooms. A majority have been able to introduce new ideas and new ways of doing things at school. Some of the innovative teaching methods include: use of IT in the classroom to support instruction; introduction of online collaborative learning and PBL activities; using the Internet as a resource in designing courses; and introducing cross-cultural learning activities. Most teachers report that the school administration has now adopted policies that allow teachers to incorporate IT into their classroom activities. This is a very positive impact, in terms of capacity building and sustainability, for individual teachers as well as for schools where these new methodologies are being introduced.

Teacher involvement in Program activities varies by the specialization or background of a teacher. While a majority of the computer science and English teachers are engaged in many, if not all, of the online Program activities, a significant proportion of the social studies and literature teachers are not. In order to engage teachers in the Program, they must see a clear connection between Program activities and their own classroom activities.

Given the broad-based goals of the Program in terms of mutual understanding, conflict resolution, and civic engagement, it is very important that teachers are well integrated into the Program. In some cases, specialized workshops or training sessions may be necessary to determine their needs and provide specific training on how to use IT to craft curriculum.

3. Development of Skills and Knowledge

A majority of the teachers report that their English skills have improved since their involvement in the Program. English language skills, per se, are not found to restrict teacher engagement in the Program. However, English skills do improve a teacher's ability to participate and lead discussion groups with people from countries who speak different languages. Teachers found that their improved English skills enabled them to express themselves better in the virtual forum where English is often the language of choice.

Responses from teachers reveal that their levels of computer skills correspond with greater engagement across a wider range of Program activities. The more confident SCP teachers are in their computer skills, the more activities they report engaging in. As a result of the Program, most teachers report improvements in their computer skills, regardless of original skill level.

4. Providing Mechanisms for English Language Teaching in BRIDGE Programs

Finally, BRIDGE teachers roundly affirm a clear multiplier effect with respect to new, innovative English language training in their schools. Many of them have integrated English language materials into the teaching of other subjects and adopted English language resources found on the Internet. The Program has also given them the skills and knowledge necessary to develop new, or revise existing, English language curricula. These changes have increased school capacity and bode well for sustainability. Teachers also share new or revised curricula with teachers in other schools. They report that simply exposing students to the Internet has led to increased motivation to learn English on the part of students.

9

MASTER TRAINER INTERNET SURVEYS

SCP AND BRIDGE PROGRAMS

Chapter Nine

A. Introduction

The role of the Master Trainer is somewhat similar across the Programs, although the selection process and duties of the Master Trainer vary by country Program. In general, the Master Trainers are individuals who provide specialized training to either teachers or computer center staff, in the case of the SCP. With the exception of the SCP Program in Bosnia and Herzegovina,⁴² all of the SCP and BRIDGE countries visited by the evaluation team made use of Master Trainers. In the SCP countries, Master Trainer is a designated paid position and carries certain duties (e.g., training teachers and computer staff, and visiting the schools in the Program). In the case of BRIDGE, a Master Trainer is a BRIDGE teacher who has completed a series of courses and is certified as a Master Trainer. BRIDGE Master Trainers serve as mentors to other teachers in the Program providing assistance and guidance when needed. The position of Master Trainer in the BRIDGE Program is voluntary and does not carry a stipend or salary.

B. Key Findings

1) *Building Mutual Understanding and Fostering Cross-cultural Learning*

- Participation in the Program among Master Trainers has provided learning opportunities, which have resulted in changes in understanding of U.S. values and culture, as well as daily life in the United States.
- Nearly all of the Master Trainers indicate that their views of the American people are “strongly favorable” to “generally favorable.”

2) *Catalyzing and Assisting Educational Reform*

- On average, Master Trainers spend about 27 hours a month training the Program teachers. On average, they provide training to 10 teachers per month.
- About 80 percent or more of the Master Trainers report introducing new ideas and knowledge, as well as new ways of doing things.
- Over half reported that they have introduced new curricula or pedagogical methods.
- Just over one-half of the Master Trainers have established new exchanges.

⁴² All training in Bosnia and Herzegovina was delivered by CRS country staff.

3) Development of Skills and Knowledge

- Ninety percent of the Master Trainers report that their computer skills have improved since their participation in the Program. Almost all of them rate their current computer skills as “very good” to “excellent.”
- Due to the training they received as part of the Program, the Master Trainers report that they now have more confidence in teaching others than before.

4) English Language Skills

- Master Trainers are much more confident of their computer skills than their English language skills. The Program has helped two-thirds of them improve their English language skills.

1. Master Trainer Characteristics

A very small group of BRIDGE Master Trainers responded to the online survey, as well as Master Trainers from some of the SCP countries. The locations of residence for this group of 87 Master Trainers are shown in Table 9.1. The largest groups of trainers in the sample came from three countries: Armenia, Tajikistan and Uzbekistan. As a group, most of the Master Trainers (67.6%) live in small cities/towns or rural locations, primarily located in Armenia, Tajikistan, and Uzbekistan.⁴³ The Programs in these countries have made a conscious effort to draw Master Trainers from the local communities; hence, the high numbers who live in areas outside the capital or major cities.

TABLE 9.1 Locations where Master Trainers Live		
Locations	Number in Sample	% of Total
Country		
Armenia	20	23.0
Jordan	1	1.1
Morocco	2	2.3
Pakistan	2	2.3
Serbia and Montenegro	1	1.1
Tajikistan	25	28.7
Uzbekistan	36	41.4
<i>Total</i>	87	100.0
Type of Residence		
Small city, town or rural location	50	67.6
Other major city	14	18.9
Capital city	10	13.5
<i>Total *</i>	74	100.0
<i>* Thirteen respondents did not answer the question regarding type of residence.</i>		

Master Trainers are about the same age as the teachers – on average, they are 32 years old. Approximately 69 percent were teachers prior to their roles as Master Trainers, and they are fairly evenly divided between men (47%) and women (53%). With the exception of seven teachers in Armenia, where the Program has been running for some time, most of the Master Trainers have been participating in the Program for one to two years.

⁴³ There is also one Master Trainer from Serbia and Montenegro that falls into this category.

Twenty-seven Master Trainers were not teachers prior to joining the Program. The majority of these reside in Uzbekistan (about 60%), with another seven in Tajikistan. There are also a few in Armenia and one in Pakistan. This group of Master Trainers tends to include more men than the other group (i.e., they are 56% versus 47% of the total).⁴⁴ Other than that, there are no real discernible differences between the groups, in terms of years of experience as a Master Trainer or level of education.

2. Preparation of Master Trainers

On average, the Master Trainers reported receiving more than 138 hours of training to prepare them to be Master Trainers. Roughly 90 percent of them rate the quality of the training they received as “excellent” to “very good” and 88.6 percent of them indicate that they *now* have more confidence in teaching others than before they became Master Trainers.

Most of the Master Trainers indicate that they have received training in a broad array of topics related to the main objectives of the Program (see Table 9.2 for list and percentage breakdowns). Interestingly, the training provided to Master Trainers follows a tier-like pattern, where certain topics are delivered to almost all the trainers and some to a majority, but not all.

The areas in which almost all Master Trainers have received training (85% or more) are: 1) use of IT in the classroom to support instruction; 2) use of Internet to introduce cross-cultural learning activities to students; and 3) introducing online collaborative learning activities. Between 70 to 84 percent of the Master Trainers have received training in: 1) Internet-based course design; 2) how to introduce PBL in the classroom; 3) how to develop and implement new curricula; 4) how to integrate civics topics into classroom projects; and 5) how to develop and implement new classroom materials.

TABLE 9.2 Training of Master Trainers		
Topics of Training Received	(%)	(n)
85% or More		
Use of information technology in the classroom to support instruction	92.8	83
Use of Internet to introduce cross-cultural learning activities	86.4	81
Introduce online collaborative learning activities to students	85.2	81
70% - 84%		
Training on Internet-based course design	84.1	82
Introduce project-based learning in the classroom	84.0	81
Develop and implement new curricula	79.7	79
Integrate civics topics into classroom projects	72.4	76
Develop and implement new classroom materials	70.9	79
Less than 60%		
Expand English-language teaching and materials	57.1	77

Does the pattern of training offered to Master Trainers reflect the primary objectives of the individual country Programs? In other words, do some countries focus more on certain types of training than others, due to the primary goals of the individual country Program? While roughly

⁴⁴ Of the 27 Master Trainers who were not teachers prior, 23 provided information on their gender. Of the 13 male Master Trainers, 10 live in Uzbekistan and 3 live in Tajikistan. The 10 remaining female Master Trainers are distributed across Armenia (3), Pakistan (1), Tajikistan (3), and Uzbekistan (3).

72 percent of the Master Trainers received training on how to integrate civics topics into classroom projects, all or most of the trainers in Armenia and Tajikistan received this type of training (100% in Tajikistan and 75% in Armenia). This is not surprising, since these two Programs specifically focus on civic education and community building.

Likewise, one area where fewer Master Trainers have received training (roughly 57%) is in expanding English language teaching and materials. This is most likely due to the fact that most of the Master Trainers in the online survey were from SCP and not BRIDGE, where English language instruction is a primary goal. Although there are very few Master Trainers from BRIDGE countries in this online survey, one trainer from Jordan and two trainers from Pakistan did receive training on how to expand English language teaching materials.⁴⁵

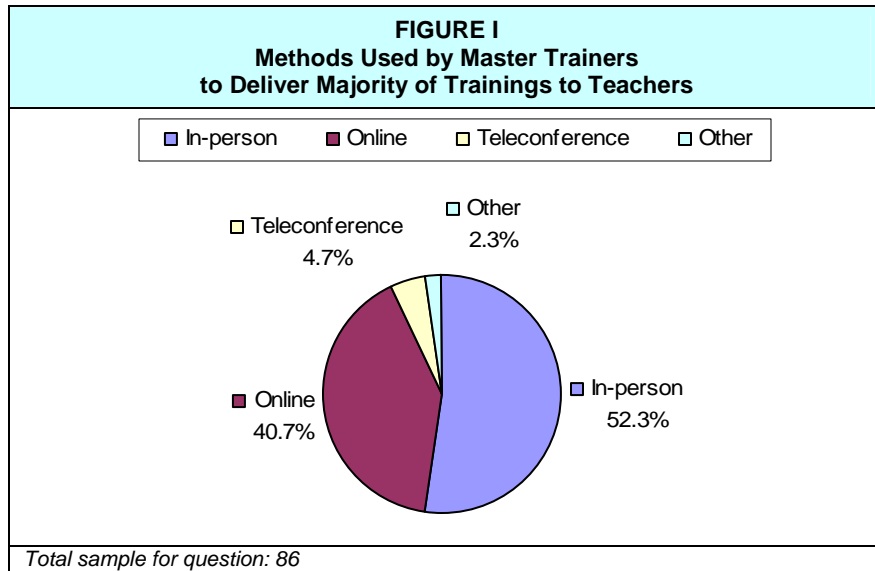
3. Activities of Master Trainers

On average, Master Trainers spend about 27 hours a month training teachers and they are able to train, on average, approximately ten teachers per month (see Table 9.3).

TABLE 9.3 Training Delivered by Master Trainers to Teachers		
Level of Training Activity	Average	(n)
Average hours a month spend training teachers	26.6	81
Average number of teachers train in one month	10.4	81
Areas of Training Delivered by Master Trainers	(%)	(n)
Training on Internet-based course design	87.8	82
Using information technology in the classroom to support instruction	86.4	81
Online collaborative learning activities for students	84.5	84
Project-based learning in the classroom	83.3	84
Using the Internet to introduce cross-cultural learning activities	80.0	80
Integrating civics topics into classroom projects	73.1	78
Developing/implementing new classroom materials	63.3	79
English-language teaching and materials	58.0	81

For the majority of these courses, in-person training is the predominate method of training delivery (52%) by Master Trainers (see Figure I). The second most common delivery method is online training (41%). There are no noticeable differences between trainers and the types of methods they prefer. Those trainers who used online methods, for example, were similar to those who did not (i.e., in terms of gender, educational level, country, or place of residence, etc.).

⁴⁵ The case for Morocco is slightly different. Of the two trainers who took the survey, one received training on how to expand English language teaching and materials and the other one did not.



C. Program Outcomes

The online survey data is examined to assess Program impact on the following objectives and outcomes: 1) mutual understanding; 2) educational reforms; 3) computer skills; and 4) English language skills.

1. Mutual Understanding

Similar to the students and teachers, a substantial percentage of the Master Trainers report that their participation in the Program has led to “moderate change” or “substantial change” in their understanding of U.S. values and culture (67%) as well as daily life in the United States (61%) (see Table 9.4). The Program offers learning opportunities that resulted in changes in mutual understanding, a primary goal of the Program.

TABLE 9.4 Changes in Master Trainer Understanding of U.S. Culture, Values and Daily Life	
	(%)
How much did participation in the Program change your understanding of U.S. values and culture?	
No Change	7.3
Minimal Change	25.6
Moderate Change	42.7
Substantial Change	24.4
Sample Totals	82
How much did participation in the Program change your understanding of daily life in the United States?	
No Change	8.6
Minimal Change	30.9
Moderate Change	34.6
Substantial Change	25.9
Sample Totals	81

Approximately 93 percent of the Master Trainers also indicate that their views of the American people are “strongly favorable” to “generally favorable.”

These opportunities are extremely important, as the majority of the Master Trainers also report having limited knowledge of U.S. values, culture, and daily life. Approximately 64 percent of Master Trainers rate their understanding of U.S. values and culture as “basic knowledge” or less, and about 56 percent rate their understanding of daily life in the United States as “basic knowledge” or less.

2. Educational Reform

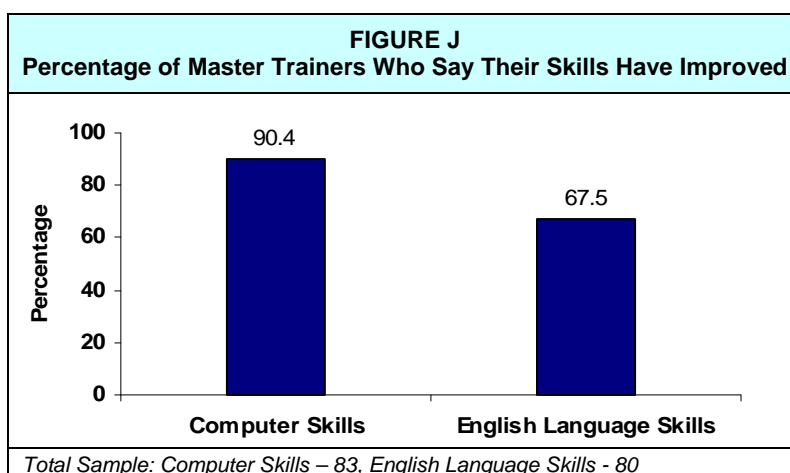
Most of the Master Trainers indicate that they have introduced new ideas, new initiatives or new ways of doing things, as well as new activities or projects in their own jobs (between 75 - 84% in each case). Almost two-thirds reported that they have introduced new curricula or pedagogical methods. Slightly more than one-half of the Master Trainers have established new exchanges. Survey findings can be seen in Table 9.5.

TABLE 9.5		
Master Trainer Reported: Initiation of Change at Work		
Reported activity	(%)	(n)
Introduced new ideas and knowledge	84.1	82
Introduced initiatives, new ways of doing things	77.5	80
Introduced new curricula, pedagogical methods, or educational standards	64.3	84
Established new exchanges	53.8	80
Introduced new policies or procedures	28.9	76
Organized or initiated new activities or projects in the same job	75.3	77

3. Development of Skills and Knowledge

A large majority (90.4%) of the Master Trainers report that their computer skills have improved since their participation in the Program, and almost all of them would rate their current computer skills as “very good” or “excellent” (96.5%).

Although the Program’s impact on the Master Trainers’ English skills is not as strong as its impact on their computer skills, there is still a substantial number of Master Trainers (64.5%) who report an improvement in their English language skills since beginning the Program. However, a sizeable proportion (30%) reported that their English language skills showed no signs of change (see Figure J).



A substantial percentage of the Master Trainers rate their current English language skills as “excellent” to “very good” (43%) or “average” (32%). Roughly 23 percent rate their skills as “not very good” to “poor.” All of the trainers who rated their English language skills as “not very good” to “poor” are in SCP countries where the focus of the Program is not on English language instruction, and the selection of trainers does not depend upon English language skills. Survey findings are shown in Table 9.6.

TABLE 9.6 Skills and Skill Development of Master Trainers		
Skill Level and Development	(%)	(n)
Computer Skills Now		86
Excellent to Very Good	96.5	
Average	3.4	
Not Very Good to Poor	0.0	
Development of Computer Skills		83
Increase in computer skills	90.4	
English Language Skills Now		85
Excellent to Very Good	43.5	
Average	31.8	
Not Very Good to Poor	23.5	
Development of English Language Skills		80
Increase in English language skills	67.5	

4. Master Trainer Satisfaction with the Program

Finally, across all of the different Program elements, Master Trainers indicated that they are highly satisfied with the Program. Roughly 85 percent or more of the Master Trainers indicated that they are “satisfied” or “very satisfied” with the administration, content, and variety of experiences provided by the Program (see Table 9.7). In terms of relevance to professional development, nearly 92 percent of Master Trainers indicate they are either “satisfied” or “very satisfied” with the Program.

TABLE 9.7 Master Trainer Satisfaction with the Program		
Elements of the Program	(%)	(n)
Program Administration		74
Very Satisfied	32.4	
Satisfied	52.7	
Neutral	10.8	
Dissatisfied	4.1	
Very Dissatisfied	0.0	
Program Content		73
Very Satisfied	31.5	
Satisfied	54.8	
Neutral	12.3	
Dissatisfied	1.4	
Very Dissatisfied	0.0	
Variety of Experiences		74
Very Satisfied	36.5	
Satisfied	50.9	
Neutral	9.5	
Dissatisfied	4.1	
Very Dissatisfied	0.0	
Relevance to professional/educational development		73
Very Satisfied	43.8	
Satisfied	47.9	
Neutral	5.5	
Dissatisfied	1.4	
Very Dissatisfied	1.4	

D. Summary Observations

1. Building Mutual Understanding and Fostering Cross-cultural Learning

An overwhelming majority of the Master Trainers reported that participation in the Program has led to moderate or substantial changes in their understanding and knowledge of U.S. culture, values and daily life. Furthermore, approximately 93 percent of Master Trainers indicate that their views of the American people are “strongly favorable” to “generally favorable.”

2. Catalyzing and Assisting Educational Reform

The role of the Master Trainers in the SCP and BRIDGE Programs is very important because they are the ones who interact with teachers, encouraging them and training them to integrate new interactive, online, and teaching methodologies in the classroom. Master Trainers provide training on IT use and how to integrate this technology into lesson plans. Furthermore, they are trained on how to design collaborative learning projects and how to design classes using the Internet, which is a new resource for many of the teachers in these countries. In the case of the SCP countries, Master Trainers provide a crucial link between the country Program staff and the participants of the Programs (teachers and students). In the case of the BRIDGE countries, Master Trainers serve as mentors and leaders among peers (teachers), providing needed momentum and enthusiasm for the Program.

In both Programs, Master Trainers are members of the communities they serve and are critical change agents. About 80 percent or more of the Master Trainers in this survey report introducing new ideas and knowledge as well as new ways of doing things. Almost two-thirds reported that they have introduced new curricula or pedagogical methods (64.3%) and about one-half recognize that they have established new exchanges (53.8%).

3. Development of Skills and Knowledge

The Program has had a clear, positive impact on the Master Trainers' computer skills; there is a high degree of confidence in this area. As seen in the teacher's chapter, computer skills, more than English language skills, determine whether or not a teacher will engage in a wide array of the Program's online activities. Therefore, the level of confidence in computer skills among the Master Trainers is important, as they are the ones that will interface with the teachers and engage them in the online activities.

4. English Language Skills

One area where a sizeable group of Master Trainers did not receive training was in the area of English language teaching and materials. In general, Master Trainers are not as confident in their English language skills as they are in their computer skills. This is not surprising, since most of the Master Trainers in this online survey are from SCP countries, where English language skills are not a criterion for selection as a trainer, nor a requisite for the job, because English language instruction is not an objective of the SCP Program.

10

MULTIPLIER EFFECTS AND PROGRAM SUSTAINABILITY

Chapter Ten

A. Introduction

This chapter examines two very important aspects of the SCP and BRIDGE Programs: the multiplier effects of Program activities and the sustainability of Program activity impacts over time, particularly as U.S. funding ceases. To look at both of these issues, this chapter draws from both qualitative data from site visits in Armenia, Bosnia and Herzegovina, Lebanon, and Tajikistan, as well as quantitative data generated by online surveys of Program students, teachers, and Master Trainers in 12 countries.

What is meant by multiplier effect? The term multiplier effect originated in economics, but its adaptation has been widespread. Simply put, it comprises the impacts that Program activities (or investments) have as they circulate through the Program, its immediate environment (human, organizational or geographic), and into the community (a ripple effect). In terms of the SCP/BRIDGE Program, investments in ILCs (in SCP) and teacher training (in the BRIDGE Program) increased participants' knowledge. This increase in knowledge and skills, and emphasis on specific activities, such as community volunteerism, outreach, and service, is circulated among Program participants, as well as among others outside of the Program (other students, other teachers, teachers in other schools, parents and siblings of Program participants, colleagues, and members of the community) – thus creating a multiplier effect.

This chapter will first review the multiplier effects of Program activities in three critical areas:

1. Shared Learning: the volume of shared learning and beneficiaries of this process;
2. Shared Learning: Knowledge and skills shared; and
3. Volunteerism and impacts on local communities.

The second part of this chapter examines the issue of Program sustainability, by assessing strategies and key elements of sustainability.

1. Strategies for sustainability generated by grantees and Program participants are:
 - Establishing and maintaining school networks;
 - Establishing and maintaining professional collaborations and relationships ;
 - Maintaining contacts with people met during the Program;
 - Collaboration with other donors in Program countries;
 - Information dissemination: maintaining awareness of Program activities, services, and impacts in local communities; and
 - Fundraising and planning to meet resource needs.
2. Key elements of sustainability addressed are:
 - Sustainability of Program activities;

- Sustainability of Program ILCs and computer centers;
- Sustainability of skills and knowledge gained; and
- Sustainability of educational reforms (e.g., new approaches, pedagogies, teaching, integration of IT into the curriculum, new approaches to English language training).

B. Multiplier Effects

1. Shared Learning: Volume of Sharing and Beneficiaries

One of the key multiplier effects is the extent of knowledge sharing among participants as well as the sharing that goes on between participants and their colleagues, peers, family members and community members. Some of this sharing can occur within the participant's own school, or with other schools inside and outside of the Program. One aspect is the sheer volume of sharing (i.e. how many people benefit) and the other is content (i.e. what new learning, knowledge and skills are shared), discussed in the next section. In the online surveys, teachers and students were asked to estimate the average number of people with whom they share their skills each month.

The online survey tabulations reveal some interesting differences between the participants of the two Programs: BRIDGE teachers report sharing their skills with approximately 31 people per month, whereas SCP teachers estimate that they share their skills with roughly 20 people per month. BRIDGE students, on the other hand, indicate that they share what they have learned with about 18 people per month, whereas SCP students report sharing their skills with approximately 29 people per month. In any case, Program participants are sharing their skills with at least 18 or more people a month, on average. So the reach of the Program goes well beyond the immediate participants involved.

In general, the different country site visits revealed that students and teachers alike share what they have learned with colleagues and friends. This is occurring in Armenia, Bosnia and Herzegovina, Tajikistan, and Lebanon. This diffusion of knowledge and skills acquired through participation in the Program occurred both formally and informally – at school and at home.

The Programs' structural variations may be impacting the differences in volume reported in the online surveys. On one hand, the BRIDGE Program, as implemented by iEARN, is entirely teacher-centered and relies upon *teachers to train other teachers* and to bring their students into the Program activities via classroom projects. Therefore, it is not surprising that BRIDGE teachers in the online survey report that they share their skills with more people than do the SCP teachers.

The SCP Program, on the other hand, while implemented by several different organizations, tends to be more centered on schools and relies more heavily on Program staff and Master Trainers for both training and determining the content of the Program. In many cases, it is the ILC staff and Master Trainers who train teachers and students. In some cases (e.g., Armenia), students interact frequently with Program staff in the computer centers. The SCP teachers also rely on the ILC staff to acquire the necessary computer skills to participate in the Program activities. Given these parameters, it is not surprising that SCP teachers in the online survey report sharing their skills with fewer people than do the BRIDGE teachers.

In terms of student sharing, the structure of the Programs may also provide some clues into the differences between the two. The SCPs rely on computer centers established in schools where all students have access to the centers and computer center staff (although not all students participate). Computer center staff in Armenia mentioned that students often provided assistance to other students, in terms of learning computer applications, establishing e-mail accounts, and how to use the Internet. The BRIDGE Program activities, on the other hand, are structured and implemented entirely by teachers who volunteer. These teachers then implement the Program activities in their classes or work with their students. While teachers in Lebanon also said that students share what they have learned with other students and family members, there is no dedicated location, like a Program computer center, per se, where students can meet to participate in the Program. Students use the same computer facilities they normally use – either in classes (e.g., private schools in Lebanon) or outside of school (e.g., Internet cafés in Lebanon). Therefore, the meeting space where students can easily interact in an unstructured way in a school is not necessarily present in the BRIDGE Program countries. This may account for the differences – across the Program - in the numbers of people with whom students report sharing their skills. So, Program structure may account for the fact that SCP students share their knowledge and skills with more people than the BRIDGE students do on a monthly basis.

2. Shared Learning: Content of What Is Being Shared

a. Knowledge, Learning, and Skills Shared

Content, of course, is vital. When teachers share new knowledge, pedagogies or skills with other teachers, and when students share new learning and skills with other students or family members, multiplier effects produce significant returns that can be exponential.

TABLE 10.1 Skills Shared by Program Participants		
Teachers – Online Survey	SCP (%)	BRIDGE(%)
Sharing with other teachers		
Computer Skills	24.9	57.1
English Language Training	9.4	40.7
Collaborative learning	16.2	39.3
How to identify educational resources online	27.4	39.3
How to introduce civic education topics to the classroom	17.9	33.3
Sharing with other schools		
New or revised curricula with other Program or non-Program schools	52.7	48.4
Students – Online Survey	SCP (%)	BRIDGE(%)
Sharing with other students		
Computer Skills	40.5	67.3
English Language Training	34.4	32.0
Sharing with friends and family members		
Computer Skills	36.8	22.4
English Language Training	26.6	56.7
Master Trainers – Online Survey	Both Programs (%)	
Sharing with other schools		
New or revised curricula with other Program or non-Program schools	61.9	
Sample Sizes: Teachers: SCP – 219, BRIDGE – 35 Students: SCP – 661, BRIDGE – 101 Master Trainers: 87		

A large fraction of the BRIDGE teachers in this survey share new skills with other teachers: 57 percent share computer skills and 39 percent share *both* collaborative learning skills and how to identify educational resources online.⁴⁶ It is important to recognize that approximately 41 percent of the BRIDGE teachers in the online survey note that they share their English Language Training with other teachers. Moreover, 48 percent of the BRIDGE teachers in the online survey indicate that they share the new English language curricula/materials they have developed with teachers in other schools.

About one quarter of the SCP teachers indicate that they share two critical skills with other teachers: computer skills (25%) and how to identify educational resources online (27%). Smaller numbers of SCP teachers share techniques for collaborative learning and the introduction of civic education into the classroom. These could be potential areas for future teacher training.

A good number of other schools in these countries benefit from Program activities and resources, even though they may not participate directly. Roughly half of the teachers in the online surveys (52.7% of the SCP sample and 48.4% in the BRIDGE sample) reported that they share new or revised curricula with other schools in the Program and/or schools outside of the Program. Likewise, approximately 62 percent of the Master Trainers surveyed indicate that they also share new or revised curricula with schools that participate in the Programs, as well as those that do not.

According to the online survey, students across the two Programs tend to share their new computer skills with other students to a greater extent than their new English language skills. Sixty-seven percent of the BRIDGE students surveyed and 45 percent of the SCP students surveyed share their computer skills with other students. About one-third of the students surveyed across the two Programs share their English language training with other students (34.4% in SCP and 32% in BRIDGE).

3. Volunteerism and Impact on Local Communities

Community outreach by Program participants created another tremendous multiplier effect. Results from the online survey, across the three groups of participants (teachers, students, and Master Trainers), in both Programs (SCP and BRIDGE), reveal very high levels of community service and outreach, as shown in Table 10.2.

TABLE 10.2 Community Service and Outreach of Program Participants		
Teachers	SCP (%)	BRIDGE (%)
Organized or participated in community service projects with students	55.6	64.5
Increased volunteer activities/community service	66.0	76.7
Students have worked with children/community members w/special needs	36.8	25.9
Students	SCP (%)	BRIDGE (%)
Increased volunteer activities/community service	44.4	88.0
Will continue to lead and/or participate in community service activities in the future	67.3	92.0

⁴⁶Some caution is in order due to the small sample size and the fact that the online survey is not representative of the entire population of BRIDGE teachers. However, this finding is illustrative.

Have worked with children/community members w/special needs	37.2	38.8
Master Trainers	Both Programs (%)	
Increased volunteer activities/community service	86.6	
Provided training to children or community members with special needs	72.4	
Organized or initiated new activities or projects in the community	64.1	
Computer Centers have contributed to greater community participation in local government	76.8	
Computer Centers have hosted or facilitated community meetings to discuss local issues	87.2	
Sample Sizes: Teachers: SCP – 219, BRIDGE - 35 Students: SCP – 661, BRIDGE - 101 Master Trainers: 87		

Although the sample size is smaller for the BRIDGE Program, teachers and students alike in these countries indicate that they participate in community service activities in large numbers. Sixty-four percent of the BRIDGE teachers surveyed organized or participated in community service projects with the students and 76 percent increased their volunteer and community service activities. In the SCP Program, 55 percent of teachers surveyed organized or participated in community service projects with the students and 66 percent increased their volunteer and community service activities. Eighty-eight percent of the BRIDGE students in the survey reported that their community service activities increased with their participation in the Program and 92 percent intend to continue with these activities in the future, perhaps in a leadership role. The figures of the SCP students surveyed are lower – 44 percent of the students increased their volunteer or community service activities, though a significantly larger proportion – 67 percent – intend to either participate in or lead community service activities in the future. Given the community service mandate of ECA Programs, in general, and these Programs specifically, this significant multiplier effect is a clear sign of the reach and impact of the Program in the broader community.

Likewise, community service figures for the Master Trainers are high. A majority of those surveyed (86%) report that their volunteer activities have increased; almost three-quarters have provided training to children or community members with special needs; and almost two-thirds have organized new activities or projects in the community.

We have had [a] program for community services where 11 teachers from our marz [sub-regional administrative unit] have participated and [another] 11 teachers were included in another project. So, this chain becomes longer...

- Master Trainer in Armenia

Moreover, 77 percent of the Master Trainers in the online survey believe that the Program computer centers have contributed to greater community participation in local government. Most Master Trainers (87.2%) report that the computer centers have hosted or facilitated community meetings and events to discuss local issues. Clearly, Program activities have had positive impacts on local communities and their members, who have profited from the benefits of participant service and volunteerism, as well as demonstrated an increased willingness to participate in or follow local affairs/government collectively.

C. Sustainability

There are several approaches to constructing Programs so that activities and momentum will be sustained once the U.S. funding ceases. The country implementers have all given this important issue extensive thought, and each has devised different strategies for addressing it.

The evaluation team ascertained the following strategies for sustainability (generated by grantees and participants in Program countries) during in-country site visits or through the responses to the online surveys administered to the different participants. Each of these will be covered in the sections below.

- Establishing and maintaining school networks;
- Establishing and maintaining professional collaborations and relationships;
- Maintaining contacts with people met during the Program;
- Collaboration with and support from other donors in Program countries;
- Information dissemination: Maintaining awareness of Program activities, services, and impacts in local communities; and
- Fundraising and planning to meet resource needs.

1. Establishing and Maintaining School Networks

Building school networks and creating local school clusters has already begun, at the initiative of Program participants. ASCP has done considerable work in establishing and maintaining a network of Program schools and computer centers. Likewise, TSCP has also built a substantial network of schools and computer centers. The BRIDGE Program in Lebanon has established a network of teachers that spans schools across the country, both in the private and public sectors.

Country Programs are finding ways to expand activities by reaching out to other schools in the Program. This was particularly evident in the case of Bosnia and Herzegovina, where conversations with teachers and a Principal revealed plans to continue using the curriculum beyond the period of the CRS funding. The Principal of the school instructed the teachers to choose another school in the SCP network as a partner for further collaboration and work. The teachers in Dobož chose a school in Bugojno. The Dobož school sent a delegation to Bugojno and is awaiting a return visit from a delegation from Bugojno. The Principal in Dobož would like to expand this network to other schools in the future.

2. Establishing and Maintaining Professional Collaboration and Relationships

The sustainability of Program activities and impacts will depend upon the continuation of professional networks and collaborative projects established during the Program. Because both SCP and BRIDGE depend so heavily upon the involvement of teachers, the professional networks established by teachers are critical. Teacher networks not only provide a larger professional community to draw upon, they also provide teachers with desired feedback towards continued professional development. During the country site visits, the evaluation team discovered that teachers are just as eager as students to learn and experience new things – the professional networks established by and for teachers are a critical part of any long-term sustainability strategy for both Programs.

Survey responses from the online surveys indicate that teachers and Master Trainers have developed and maintained professional relationships with colleagues they met in the course of their Program activities (see Table 10.3).

TABLE 10.3 Sustainability of Professional Networks Developed During Programs		
Teachers' Professional Networks	SCP (%)	BRIDGE (%)
Continued professional collaborations that grew out of Program experience	62.1	80.0
Very likely to continue professional relationships once participation in the Program ends	40.2	71.4
Master Trainers' Professional Networks	Both Programs (%)	
Continued professional collaborations that grew out of Program experience	55.4	
Very likely to continue professional relationships once participation in the Program ends	41.3	
Sample Sizes: Teachers: SCP – 219, BRIDGE - 35 Master Trainers: 87		

Eighty percent of the BRIDGE teachers have continued professional collaborations that grew out of the Program; 62 percent of the SCP teachers have done so, as well. More BRIDGE teachers than SCP teachers are optimistic about the likelihood of continued professional relationships once the Program ends (71% compared to only 40%). Master Trainers surveyed have also reported continued professional collaborations (55.4%). A smaller percentage, 41 percent, believes that they are very likely to continue professional relationships once their participation in the Program ends.

The momentum generated by forming new relationships is also key. The BRIDGE Program in Lebanon, for example, is growing steadily and the iEARN coordinator believes it has reached a point where it is sustainable, even without her intervention. Over the past 3 years, the Program has grown from 30 teachers to 80 teachers. In 2005 alone, they had 48 training sessions on English language training methodologies and in 2006, they had 80. Two of the Lebanese BRIDGE teachers were selected in 2006 to participate in the US Fulbright Program for one year. At the iEARN 3rd annual regional conference held in Beirut in July 2005, 150 participants representing 15 different countries attended, including 10 teachers from the United States.⁴⁷

3. Maintaining Contacts with People Met During the Program

Because these Programs are virtual exchanges, the connections between people become particularly important for sustainability, once U.S. government funding ceases. If the connections between people are solid, the need for sustained financial resources does not become the sole determining factor in a Program's sustainability – assuming that activities are up and running and the people involved in the networks take ownership. The country site visits and focus groups revealed many examples of individual initiative and collaboration between people that did not necessarily depend upon outside funding or structures.

⁴⁷ Participants for the 3rd Annual Regional iEARN conference in Beirut came from the U.S.A., Egypt, India, Jordan, Lebanon, Pakistan, Nepal, Bangladesh, Oman, United Arab Emirates, Morocco, Tunisia, Malaysia, Indonesia and the Netherlands.

Teachers, students, and Master Trainers were asked to respond to questions regarding the contacts they have made during their participation in the Program. As a group, substantial proportions of these have remained in contact with people they have met during the Program (see Table 10.4).

TABLE 10.4		
Sustainability of Personal Contacts Developed During Program		
Teachers' Personal Contacts	SCP (%)	BRIDGE (%)
Have remained in contact w/people met during the Program	71.3	76.0
Students' Personal Contacts	SCP (%)	BRIDGE (%)
Have remained in contact with people met during the Program	56.3	82.4
Master Trainers' Personal Contacts	Both Programs (%)	
Have remained in contact with people met during the Program	78.6	
Sample Sizes: Teachers: SCP – 219, BRIDGE - 35 Students: SCP – 661, BRIDGE - 101 Master Trainers: 87		

Comments from a student and teacher in Lebanon reveal how individual initiative leads to increasing returns for BRIDGE activities.

I am going to be an ambassador to iEARN ... in my school so whenever somebody wants to join iEARN, they will come to me and ask me.

- Student in Lebanon

We also held a lot of seminars at the end of every year and they [students] presented their workshop, they presented their presentation in the YouthCaN conference.... after the first year we started the ecology club and the number of students participating in the ecology club is increasing every year now...

- BRIDGE Teacher in Lebanon

4. Collaboration with and Support from Other Donors in Program Countries

Synergy established through collaboration with other donors in Program countries has been, and will continue to be, critical to the long-term sustainability of these activities and the transition to local stewardship. Evidence of local initiatives to establish links with other organizations, as a means of building upon current activities and leveraging additional funding, was reported in Armenia, Lebanon, and Tajikistan.

The ASCP has collaborated with UNDP to establish and support four Regional TeCes. It is expected that soon these centers will have video conferencing capabilities that will allow for cross-regional events.⁴⁸ Currently these centers serve as training hubs for the ASCP and UNDP initiatives. The four centers are located in the Marzpetaran (Regional Government) buildings in: Yerevan, Gyumri, Kapan and Yeghegnadzor.

⁴⁸ According to Project Harmony offices in Vermont, these regional centers are already connected.

TSCP, in order to build upon activities already underway in the area of community building and support, has deliberately set out to contact other donor organizations and organizations in the development field. In particular, they approached CARE to discuss the project and decided to locate SCP schools in communities where CARE was already working, in order to leverage the work in community involvement already accomplished.

In addition, UNICEF, UNDP, Merlin⁴⁹ and Population Services International have all expressed interest in conducting trainings in the TSCP ILCs. This will provide some funds to the centers as these organizations pay for the use of these facilities. A local NGO has also held a three-day seminar in Konibodom on ‘Human Rights’ at the ILC. Other organizations have also relied on the TSCP centers: Junior Achievement started a series of economics training courses for TSCP economics teachers, and ORA International reserved time in the centers in Dushanbe and Kulyab for children and adults with disabilities.

TSCP has received some additional funding from the Hewlett Packard Foundation, the Global Catalyst Foundation, and the British Embassy in Tajikistan (they contributed \$17,000 to include an additional school in the Program).

Finally, a BRIDGE teacher in Lebanon explained how relationships were established with individuals from the UNDP. These ultimately lead to connections and financing from the World Bank for the school’s project.

In effect, there are ample opportunities – both big and small - for leveraging resources. As the Programs develop, other donors become aware of their activities, enabling, in some instances, collaboration and leveraging of funds and activities. As the participants themselves become more involved and experienced, they also are reaching out, making contacts with counterparts in different organizations and, in some cases, the results are new sources of funding for Program activities.

5. Information Dissemination: Maintaining Awareness of Program Activities in the Local Communities

The sustainability of the SCP and BRIDGE Programs will depend – to a significant degree – on Program awareness among local communities and in Program countries. Awareness can generate or reinforce local community willingness and ability to raise funds for future activities. In light of this, sustainability benefits from the dissemination of information about the Program by participant teachers, students, and Master Trainers. Indeed, all three have been actively sharing their experiences with the Program through media interviews, presentations in their communities, and newspaper articles.

⁴⁹ Merlin is a U.K.-based NGO that specializes in health care and medical relief for vulnerable people. They currently work in fifteen countries.

TABLE 10.5 Dissemination of Program Experience to the Community		
Teachers	SCP (%)	BRIDGE (%)
Participated in media interviews to share Program experience	34.2	44.0
Gave presentations in community to share Program experience	55.5	81.5
Wrote newspaper articles to share Program experience	17.1	28.0
Students	SCP (%)	BRIDGE (%)
Participated in media interviews to share Program experience	34.5	68.8
Gave presentations in community to share Program experience	45.3	90.9
Wrote newspaper articles to share Program experience	19.9	27.7
Master Trainers	Both Programs (%)	
Participated in media interviews to share Program experience	62.3	
Gave presentations in community to share Program experience	79.2	
Wrote newspaper articles to share Program experience	39.7	
Sample Sizes: Teachers: SCP – 219, BRIDGE - 35 Students: SCP – 661, BRIDGE - 101 Master Trainers: 87		

Participants have been steadily engaged in giving presentations on the Program to their communities – between 55 and 81 percent of the teachers surveyed, between 45 and 91 percent of students surveyed, and 79 percent of the Master Trainers. Almost all of the BRIDGE students in this online survey have made presentations to their communities regarding their Program experiences.

Many teachers and students have participated in media interviews. Again, this type of participant visibility is an important vehicle for promoting community awareness and increasing the likelihood of Program sustainability. It also reflects a great deal of self-confidence and enthusiasm on the part of students who share their experiences with a wider audience via the media. Roughly 69 percent of the BRIDGE students and 34 percent of SCP students in the survey have interacted with the local media regarding Program activities. Master Trainers have been extremely visible in the media: 62 percent have been interviewed and nearly 40 percent have written newspaper articles sharing their experiences mentoring and guiding the Program. While the figures for Program teachers and students writing newspapers article are lower, they are still noticeable -- about 20 percent (or one-fifth) have done so.

As highlighted above, a large number of Master Trainers (87%) say that the computer centers have hosted or facilitated community meetings and events to discuss local issues (see Table 10.5). The computer centers have served as focal points for community activities, no doubt contributing to a wider sense of community involvement and interest in these Programs. In sum, participants are actively sharing their experiences with other members of their communities through formal media channels. This can only increase the visibility of these Programs, offer evidence of enhanced student participant esteem, and potentially could lead to more community involvement and Programs sustainability.

6. Fundraising and Planning to Meet Resource Needs

Sustainability depends, to a great degree, on the extent of resources necessary, as well as parent and community action and involvement in crafting action plans, to develop mechanisms for raising funds. Communities must raise funds for Program activities if budgets are not forthcoming from governments (local or national). This is particularly true in the SCP countries, where implementers established computer centers in schools that previously had no such facilities, and where the Program covers the cost of Internet connection fees. This is less of a concern in the BRIDGE countries, due to the Program's structure. For example, iEARN required private schools in Lebanon to have computers and access to the Internet in order to join the Program. Public schools in Lebanon, however, were not required to have a computer center in order to participate in BRIDGE. Thus, the level of financial demands with respect to the maintenance of computer facilities for Program activities is either less in the BRIDGE countries (i.e., public schools) or already covered (i.e., private schools).

In terms of raising funds, *approximately three-quarters of the Master Trainers indicated that local funds have been raised to support Program activities and roughly 57 percent of them anticipate that Program activities will continue after the current funding ends. Over half (52%) of the SCP teachers in the survey indicate that funds have been raised in the school or community to support Program activities. One-quarter of the BRIDGE teachers report such fundraising activities (see Table 10.6).*

TABLE 10.6 Local Fundraising for Program Activities		
Students	SCP (%)	BRIDGE (%)
Parent and community groups have formed to plan out and/or raise funds for future existence of Program activities	39.6	55.2
Teachers	SCP (%)	BRIDGE (%)
Parent and community groups have formed to plan out and/or raise funds for future existence of Program activities	59.6	33.3
Funds have been raised in school or community to support Program activities	52.1	26.9
Master Trainers	Both Programs (%)	
Local funds have been raised to support Program activities	73.7	
Anticipate that Program activities will continue after funding ends	56.6	
Sample Sizes: Teachers: SCP – 219, BRIDGE – 35 Students: SCP – 661, BRIDGE – 101 Master Trainers: 87		

While we do not have figures on the amounts of funds raised, community involvement and support are clear. These findings also are a good indication that there is some local capacity and enough interest to ensure that select Program activities will continue once the current funding ends. One example in Tajikistan illustrates the potential for individual initiative and community involvement in the centers: a center director in Konibodom sought support in the local community, prior to the center's inauguration. He solicited contributions from the local government, a factory, and the center's Parent's Committee. Due to these efforts, he was able to raise \$1,100 to equip the school's future center with new furniture, rugs, and curtains.

Finally, a majority of the teachers in this online survey do believe that their school's administration is capable of administering the Program activities on their own (67.5% in SCP countries and 81.5% in the BRIDGE countries).

a. Resource Concerns and Fundraising

As mentioned above, the issue of funding is particularly important in the SCP countries, where computer centers were established and need to be maintained, as well as in public schools in the BRIDGE countries, where resources may be lacking for computers and Internet connection fees. In most of the countries visited, teachers and principals alike expressed concern regarding the costs of updating computer equipment, Internet connection fees, and network maintenance fees for the computer centers. Most of the school principals or computer staff administrators agreed that while they may be able to charge a nominal fee to community users, these fees will not cover all of the expenses involved (i.e., Internet connection, equipment upgrade, and maintenance). Comments from participants in Armenia, Bosnia and Herzegovina, and Tajikistan reveal the nature of the challenges that the country Programs face.

Armenia

ASCP is structured so that one person is responsible for the operation of the center. This implies a salaried position, in addition to computer equipment and the Internet connection. All of these costs add up. School administrators, teachers, and ICC coordinators also expressed concern regarding the funding of the computer center network, as they anticipate sufficient government funding to support about half of the existing centers.

I think that the money is not enough for paying salaries to center administrators. It is not enough even for covering the expenses for [the] Internet connection...

- Teacher in Armenia

Bosnia and Herzegovina

Teachers and school administrators speculated that, if the Canton became stronger as a result of the educational reform underway in Bosnia and Herzegovina, the school could submit a request for funds to support the Internet connection. Similarly, in one town, the school Principal indicated that the Ministry of Education considers the Program to be a vital service to all schools; however, funding is lacking. He said that, in 2005, the Ministry was several months behind in paying out funds already budgeted. So, something outside of the normal budget may be jettisoned – “even more so if it is seen as ‘optional,’ like Internet connection fees.”

Basically, the Program has built teachers' capacity to work in new ways, but if we can't get new materials or hardware ... we can't cover all the expenses this kind of learning entails. This Program has brought a real increased focus on IT learning, and that just doesn't happen on its own – it takes planning, materials, retraining, etc.

- Teacher in Bosnia and Herzegovina

Tajikistan

TSCP acknowledges that sustainability is the biggest challenge in any Program, and that they have put extra emphasis on this component, with training sessions designed for Community Committees. These committees signed a document at the opening of the center, stating they would meet once per month to discuss relevant issues, community involvement, and support.

We assume that initially they [the community] will expect our organization to provide further support in terms of supplies and toner. Unfortunately, this is a legacy of Soviet subsidies and the distribution of humanitarian aid in the past.

- RI-SOL Staff in Tajikistan

However, staff members from RI-SOL in Tajikistan noted some of the challenges they foresee, in light of cultural expectations and past experiences, which will make the transition to full community support and sustainability difficult. In particular, the legacy of the Soviet state system and humanitarian aid pose real challenges. The novelty of securing funds for these centers in the community itself will take some time to overcome. In addition, poverty in rural areas is particularly pronounced. Many of the school Directors felt that they simply could not ask the communities in these areas to contribute to the centers *financially*, when many people cannot meet even basic needs.

b. Action Plans

Fortunately, many of the implementers have spent considerable time and effort in developing action plans, to put into place mechanisms that will enable participants to learn methods to sustain Program activities and facilities. There is clearly a movement by communities in Program countries to organize and craft action plans for sustainability – in terms of resources, maintenance of facilities, and training, all of which are extremely important to the impact and legacy of the Program. As shown in Table 10.6 above, roughly 60 percent of the surveyed teachers in SCP countries and one-third of the surveyed BRIDGE teachers affirmed that parent and communities groups had already formed to plan out and/or raise funds for future Program activities.

Action plans can be as simple as a strategy for moving towards a particular goal, or they can set in motion more formalized work plans or establish new organizations. Two cases illustrate each of these approaches.

Armenia

In the case of Armenia, the government is only able to maintain 180 of the 324 computer centers in the network once U.S. funding ends. In reaction to this, Project Harmony has organized approximately 20 one-day regional seminars for school Principals and ICC staff. Seminar participants receive instruction and then are requested to complete the following tasks:

- Organize and develop a short-term action plan for the work of the ICC, and
- Develop an ICC promotional plan.

In addition, there is an online forum, ‘Ask for Advice,’ on the ASCP website dedicated to sharing information between schools, with models and samples of effective ICC practices. Of course, simply providing formalized training on how to sustain the ICC may not always guarantee that school administrators or teachers will be able to raise enough funds or maintain the Program.

Recently, a seminar about sustainability and fundraising was organized. During the seminar we were informed how to use the resources of the center, in order to be successful. It was a great Program, and contained very useful ideas, but it is necessary to use them in practice.

- Teacher in Armenia

Part of the ASCP structure lends itself to the continuation of Program activities. There are currently 19 Regional Program Coordinators working for Project Harmony.⁵⁰ It is expected that once Project Harmony transitions out of Program implementation, this group will serve as the cornerstone in building the national capacity to sustain ASCP. These Regional Program Coordinators may be particularly critical in developing and disseminating action plans for fundraising and the sustainability of Program activities.

Tajikistan

One of the most difficult obstacles to a self-sustaining and self-financed ILC in Tajikistan is government regulation. Each center must register individually with several different government agencies in order to be able to raise money in the schools. For example, if a school takes in more than \$5 a month, it must register as a business and is subject to Tax Inspection. Likewise, by law, any organization that raises money using communication technology must register with the Ministry of Communications. Not only must schools register with national entities but, in the event they raise money through the centers, they must also register with the local Education officials as well as the regional agencies responsible for communication. Since the TSCP schools are public schools, they have no other mechanism, such as tuition fees, which would enable them to bypass the direct collection of money to use the center.

In December 2004, RI-SOL formally registered an independent NGO named “Internet,” based in Dushanbe. This NGO serves as an umbrella organization for all the centers, thus creating a network of ILCs. As such, the NGO can:

- Independently seek funding opportunities;
- Look for organizations that are willing to fund seminars and trainings at the centers;
- Apply for grants and act as a clearinghouse for grant opportunities; and
- Set standards and conditions that the local schools must adhere to, such as ensuring community access to the centers and participation in educational programs.

Each school center will be given two options.

⁵⁰ The regional coordinator information can be found at:
(<http://www.projectharmony.am/index.html?l=en&page=regional&type=1>).

- First, they may submit a plan to run the center without the NGO's support. If they pursue this option, they will be required to register the center with all the appropriate governmental agencies and submit a sustainability plan to RI-SOL before they eventually transfer ownership of the technical equipment.
- Second, the center can join the NGO and become a legal part of the locally registered Connectivity organization. They will not have to independently register or present monthly reports to governmental agencies. They would be included in any proposals written to support the Connectivity project as a whole and in proposals for specific projects if an agency wants to run a Program in just one part of the country. The center will also be guaranteed a lower Internet rate as part of the collective. The center's obligation in joining the network is that it would be required to participate in future Connectivity projects for a minimum or defined number of hours per week.

During the transition period, RI-SOL will be responsible for pursuing funding opportunities to continue the Internet payments and training programs. On the school's part, they must develop transparent systems of accounting, such that money earned at the center returns to the center, and they must commit to the long-term community goals of the center. There is hope that not only will the structure of a national NGO lead to sustainability of the centers and the Connectivity Programs, but that it will also lead to a larger network of schools over time.

7. Multiplier Effects and Sustainability: Transfers of Knowledge Gained via Personal Initiatives of Participants

The multiplier effects of the Program will have an enormous impact on all aspects of sustainability, as participants reach out, transfer new knowledge and skills, and relate the knowledge and experiences gained to peers, colleagues, and community leaders and members. Ultimately, these will be critical in sustaining Program activities and impacts. Teachers' comments in Armenia reflect this need.

- *When you serve a given subject to students they decide to participate in a program or not. If the first lesson is not interesting then he will not participate... but if the group of students becomes larger [then] students wish to participate.*
-- Teacher in Armenia
 - *Our school also participated in a number of online and offline programs.... 22 teachers have left for USA for 18 days..... We have been introduced there [to the American] education system. Now we share our knowledge with other teachers here. We have prepared presentations ... we organized a meeting in our marz with the help of Project Harmony and we shared our experience with Armenian teachers.*
-- Teacher in Armenia

Students are a critical part of the process, since they provide needed outreach to other students. Students at two schools in Travnik, Bosnia and Herzegovina report that they continue to help non-SCP students develop IT skills. The efforts of students who enthusiastically share what they have learned should not be minimized as an important factor of sustainability. Ultimately, SCP and BRIDGE activities will be maintained through the individual efforts of school principals, teachers and students.

...Some guys from our school come here, and we'll show them how to use the Internet, how to set up a[n] e-mail account so they can get e-mail, and how to make websites, if they want to know that.

- Student in Bosnia and Herzegovina

D. Summary Observations on Sustainability

Financial investment is only one element in achieving long-term sustainability goals. Center longevity and vitality depend upon many of the elements mentioned in this chapter, such as collaboration among Program participants, and student and teacher enthusiasm in remaining engaged in Program activities and sharing what they have learned with others. Sustainability depends on innovations on the part of implementers and center directors, as they explore new ways to maintain the investments in the SCP/BRIDGE Programs to date.

There are challenges to Program sustainability in all of the countries. However, there are signs that key elements of sustainability are being addressed.

1. Program Activities

The volume of sharing that is occurring among participants indicates not only enthusiasm for the Program, but also the longevity of Program activities themselves. Furthermore, community awareness of the Program will contribute to the sustainability of many Program activities. Program participants have organized community service projects and actively disseminated information to their communities on Program activities via media interviews and presentations.

2. Internet Learning Centers and Computer Centers

In some instances, the sustainability of the centers themselves represents the most significant challenge, due primarily to the costs associated with an Internet connection, as well as the upkeep and upgrading of computer equipment. Establishing mechanisms in these communities to maintain these centers will take some time. Examples in Armenia and Tajikistan reveal how implementers are experimenting with different ways of approaching this issue. It is most likely that the initial stages of the transition will require assistance from the implementer. In the end, however, the interests of the community itself will be a strong determining factor in the maintenance and sustainability of these centers.

3. Skills and Knowledge Gained

The skills and knowledge gained by Program participants are sustainable if these skills are practical and useful, not just limited to the Program itself. In other words, if the participants use their new skills outside of the Program or after its completion, then investments in these areas will be sustained. From the online surveys, it is clear that students and teachers are sharing (i.e., teaching) critical computer and English language skills to others. When others outside the Program want to learn these skills, this indicates that the knowledge and skills acquired by the

participants have a wider value and will be useful not only to participants after the Program ends, but also to others.

4. Educational Reforms

In terms of education reforms, many of the critical Program activities and initiatives appear to be spreading among not only participants, but also among schools outside of the Program. Roughly half of the teachers surveyed in the two Programs (SCP/BRIDGE) are sharing new or revised curricula with other Program and non-Program schools. Likewise, 62 percent of the Master Trainers are sharing new or revised curricula with other Program or non-Program schools. In addition, teachers are sharing critical skills they have learned with other teachers. Twenty-seven percent of the surveyed SCP teachers are sharing how to identify education resources online with other teachers and 39 percent of BRIDGE teachers surveyed are doing so. In addition, nearly 41 percent of the BRIDGE teachers in the online survey are sharing their English language training with other teachers.

The professional collaborations established among teachers are critical for the sustainability of educational reforms because it is through the work of the teachers that these activities will continue. A majority of the teachers surveyed (62% of the SCP teachers and 80% of the BRIDGE teachers) indicate that they have continued to engage in professional collaborations that evolved out of their experiences with the Program.

11

CONCLUSIONS

Chapter Eleven

While the six School Connectivity Programs varied in their implementation and country context, all four of the country Programs selected as case studies and site visits for this evaluation are achieving or have achieved Program goals.⁵¹ There is substantial evidence of desired outcome achievement across the Programs in the four countries visited, as well as among the participants in the twelve countries who took part in the online surveys.

There are four goals common to all of the School Connectivity Programs:

- Building mutual understanding;
- Building the skills and knowledge of Program participants;
- Assisting educational reform; and
- Program sustainability.

In addition to these four overarching goals of the School Connectivity Programs, there are three regional goals particular to certain Programs:

- Civic Education, Community Building, and Community Service (Central Asia and Eurasia);
- Reconciliation and Regional Stability (Southeastern Europe); and
- English Language Instruction (BRIDGE).

The Programs' effectiveness in achieving each goal is synthesized below.

A. Mutual Understanding

The quantitative, online survey data, and qualitative data collected in site visits and focus groups, revealed that students, teachers, and Master Trainers all expanded and enhanced their awareness of other cultures as a result of their participation in the Program. Seventy-seven percent of the SCP and 89 percent of the BRIDGE survey respondents stated that working on joint projects with partner schools resulted in a better understanding of that partner's culture or society. In focus groups and informal discussions, students report "discovering" that students from other countries are very much like them. Many of the students and teachers emphasized how friendships have formed between participants in different countries through the online activities. These online activities have served as important mechanisms for learning about different cultures and the daily life in these countries.

⁵¹ The six School Connectivity programs comprise: Armenia School Connectivity Program (ASCP); Azerbaijan Connectivity; Tajikistan School Connectivity Program (TSCP); Uzbekistan Connectivity; SCP in Southeast Europe (SEE); and Building Respect through Internet Dialogue and Global Education (BRIDGE) in South Asia, the Near East, and North Africa.

Indeed, as Program projects and new information technologies have been integrated into BRIDGE course activities, there has been a shift in the students' orientation. According to BRIDGE teachers in Lebanon, BRIDGE students now understand that they live, learn, and function in a public space that is less confined. The students now recognize that others are more like them, with similar cares and concerns, views and opinions. They have discovered that there are not as many differences between people as they had first imagined.

The SCP in Bosnia and Herzegovina effectively linked the goal of mutual understanding to those of conflict resolution, inter-ethnic dialogue, and reconciliation. SCP students from Bosnia and Herzegovina emphasized that they have learned about life in Kosovo and Albania from other SCP students in these countries. SCP participants in Tajikistan almost unanimously talked about the value of learning about U.S. students' lives, as well as the importance of creating ties with youth both in the United States and in their own region of the world. The TSCP has mobilized young people, providing them virtual access to the world and its diversity beyond the boundaries of their communities, in spite of living in a relatively isolated country just emerging from the former Soviet Union. In Armenia, regional communication is particularly evident in the ASCP online interactions. ASCP teachers are in communication with other schools in Azerbaijan, Russia, Chechnya, and Turkey.

No matter how much or how little students knew prior to the Program, the online survey data demonstrate that students have changed their views of U.S. culture and values, as well as daily life, as a result of their participation in the Program. Approximately 80 percent or more of the BRIDGE students in the online survey say their understanding of U.S. values and culture and daily life have changed moderately or substantially. Slightly more than half of the SCP students report a moderate or substantial change in their understanding of U.S. values and culture, and about the same percentage report similar changes in their understanding of daily life in the United States.

Students and teachers alike hold positive views of the American people as a result of their participation in the Program. BRIDGE students in the online survey have a very positive view of the American people – 87 percent hold a generally or strongly favorable view. Approximately 78 percent of the SCP students feel this way as well. Ninety percent or more of the BRIDGE and SCP teachers say they hold 'generally favorable' or 'strongly favorable' views of the American people.

Students have also developed formal and informal linkages with other students through the online activities. They use these to discuss both personal and project-related issues. Eighty-two percent of BRIDGE students in the online survey have remained in contact with people they met during the Program, as have 56 percent of the SCP students. Teachers also remain in contact with people they have met in the Program: 76 percent of the BRIDGE teachers surveyed and 71 percent of the SCP teachers have done so. Seventy-eight percent of the Master Trainers are in contact with people they met during the Program.

B. Skills and Knowledge Development

Students in the SCP and BRIDGE Programs report greater use of IT in their schools. In tandem with this, they are cultivating a wide range of technical skills marketable in a digital world. These are key objectives of the connectivity Programs (English language skills development is discussed below, in Section G).

Students and teachers in both Programs report that they have learned a number of new computer applications and related skills.

Table 11.1 Computer Applications Cited by Students and Teachers	
Students	Teachers
Internet Research	Internet Research
Online discussions	Online Discussions
E-mail	E-mail
Word Processing/spreadsheets	Word Processing/spreadsheets
	PowerPoint

The development of sophisticated IT skills is evident across the Programs, particularly in Armenia, the oldest of the Programs, where 195 schools in the ASCP network have started creating and developing school websites.

Participants give themselves high marks for improvement in computer skills. In the 12 countries included in this evaluation, students and teachers report that their computer skills have improved (83.7% of SCP teachers, 69.7% of BRIDGE teachers; 81.7% of SCP students and 78% of BRIDGE students). Improvements in computer skills have the side effect of boosting self-esteem; teachers who spoke to the evaluation team during site visits noted that students have become more self-confident as they have acquired new computer skills. The teachers themselves also reflected on their own increased self-confidence, the result of participation in the Program, acquisition of new computer skills, and greater comfort with new technologies. This increase in student and teacher self-confidence has had a significant ‘spill-over effect,’ such that participants demonstrate a willingness to try new things and to share their knowledge and computer skills with others.

The Program’s focus on using the Internet for educational purposes has clearly influenced attitudes and behaviors of students and teachers alike. Both groups of participants report using the Internet to look for information for a class or an online project. In some instances, students and teachers report that this is a new approach for them; previously, they simply browsed books for information and looked no further if they did not find what they wanted. Both students and teachers commented on the ease of access to the Internet as a result of the Program, and the realization that there is much more information available than they had previously imagined. Increased use of the Internet on the part of students and teachers is a testament to the positive impacts of the Program.

Finally, students and teachers across the Programs point to numerous areas in which they have acquired skills. The Programs are designed to ensure that students and teachers develop the

facility to apply newly learned skills, in a wide range of online activities and projects, and in many different fields. For example, SCP teachers and students in Tajikistan say that the online collaborative learning programs and project groups demand the application and creative use of new skills, such as online research. Additionally, BRIDGE students report that their involvement in the Program has also helped them to develop critical life skills, such as teamwork and team building, and SCP in SEE provides students in the region with skills in collective problem solving. Students across the Programs have developed strong communications skills, and all Programs provide students with a context and environment in which to develop and exercise new skills in critical thinking.

C. Educational Reform

Teachers in the four countries selected for site visits indicated that their school administrations actively support one of the Program's main educational reform goals: integrating and introducing new technologies into classroom activities. This result is corroborated in the online teacher survey, where 75 percent of the SCP teachers and nearly 62 percent of the BRIDGE teachers report that the school administration has adopted policies that allow teachers to incorporate IT into classroom activities. In many cases, the grantee selected schools whose principals clearly supported the goals of the Program. Site visits to schools revealed that the younger and/or Western-educated principals were particularly enthusiastic about the use of new technologies and new methodologies. In some instances, school principals mentioned that SCP gave them the opportunity to implement reforms in the classroom more quickly than might otherwise have been possible, given the orientation of the Ministry of Education and other situational factors.

For example, the Tajikistan educational system has always emphasized memorization and rote learning, even at higher levels of study. The TSCP's PBL orientation and activities have offered participating schools more student-centered, interactive approaches to learning, consistent with classroom practices and teacher training in the United States for the past two decades. TSCP has assembled a small but qualified cadre of teacher trainers who are now well-versed in introducing new methods and a new philosophy of teaching, such as PBL, cooperative learning, and the integration of technology and pedagogy.

As a result of their training and participation in the Program, 78 percent or more of the teachers surveyed believe they now have a greater understanding of IT applications in the classroom, principles of online collaborative learning, and PBL. Seventy percent or more of the teachers surveyed report that they have introduced new ideas and knowledge at work, as well as new ways of doing things. The BRIDGE Program's reliance on teacher training and mentorship imparts critical skills to teachers and gives them ownership of the project. Teachers have become more proactive in the classroom and emphasize that they feel empowered as a result of their participation in BRIDGE activities.

Teachers report actively applying what they have learned. Across the twelve countries, 72 percent of SCP teachers and 94 percent of BRIDGE teachers surveyed have taken part in online projects. Nearly 77 percent of SCP teachers and 88 percent of BRIDGE teachers have participated in online fora. Many of the teachers point out that they have incorporated the use of the online fora into their regular classroom activities. This was particularly evident in the

comments from teachers in Lebanon, who are applying new IT and methodologies across a variety of disciplines (English, Science/Biology, and Computer Science). In Armenia, two mathematics teachers have used computers in their classes to visually demonstrate complex mathematical concepts. This new approach was well received by the students—so much so that the two teachers plan on presenting seminars/classes to other schools. In Tajikistan, teachers reported using the Internet as a resource for both classroom materials and suggestions on improving instruction in specific curriculum areas. Throughout the Program countries, teachers have been assisted by the Master Trainers, most of whom have introduced new ideas, new initiatives or new ways of doing things, as well as new activities or projects (between 75 – 84 percent in each case). Almost two-thirds reported that they have introduced new curricula or pedagogical methods (64.3%).

Comments from students in Armenia, Bosnia and Herzegovina, Lebanon, and Tajikistan affirm that the classroom culture has changed as a result of the Program: teachers are implementing practices and methodologies which are more student-oriented and collaborative. Many teachers commented that they have begun to behave more as facilitators of the learning process, rather than the sole source of information and learning. As a result, students have more of a voice, speak out more in class, and are more confident in expressing themselves. Almost all of the BRIDGE students have been empowered to try new things and initiate changes at school, such as introducing new ideas and new curriculum. About half of the SCP students indicated that they have introduced new ideas at school as a result of the Program.

Both students and teachers across all Programs have become more motivated as they have worked on the Program's project-based activities. This is particularly true when computers or the Internet are used actively in the classroom; teachers note an increase in levels of attendance and enthusiasm. Simply put, students find it more interesting to work on computers or access the Internet, rather than approach subjects in a more traditional way. In this way, the Programs support student engagement and commitment to learning.

Although some teachers in the focus groups indicated that they were *initially* reluctant to use new methodologies and were doubtful about using computers, they became more confident as they mastered new skills. Many teachers recognize the importance of acquiring computer skills and are enthusiastic about the training they have received as a result of the Program. Computer skills are strongly associated with wider teacher participation across *all* Program activities. More specifically, the results of the online survey show that the greater a teacher's confidence in his/her computer skills, the more activities in which a teacher will be engaged. Teachers with 'excellent/very good' computer skills report participating in approximately five activities, whereas teachers with 'poor' computer skills report engaging in approximately two activities.

Teachers indicate that they have established important, virtual connections with fellow professionals that support and reinforce educational reform. Many of the teachers anticipate they will maintain these professional relationships, and they are optimistic they will continue to collaborate on online activities. Eighty percent of the BRIDGE teachers have continued professional collaborations that grew out of the Program and 62 percent of the SCP teachers have done so as well.

D. Program Sustainability

The evaluation team ascertained strategies for sustainability generated by grantees and participants in Program countries through analysis of the data. These strategies are deliberate, well-conceived actions and initiatives designed to underpin and secure Program sustainability, once U.S. funding ceases.

- Establish and maintain school networks;
- Establish and maintain professional collaborations and relationships;
- Maintain contacts with people met during the Program;
- Collaborate with and support other donors in Program countries;
- Disseminate information: Maintain awareness of Program activities, services, and impacts in local communities; and
- Fundraising and planning to meet resource needs.

The main points are synthesized below.

Building school networks and creating local school clusters has already begun, at the initiative of Program participants. ASCP has done considerable work in establishing and maintaining a network of schools and computer centers. Likewise, TSCP has also built a substantial network of schools and computer centers. The BRIDGE Program in Lebanon has established a network of teachers that spans schools across the country, both in the private and public sectors.

Indeed, the *professional networks established* by and/or for teachers are a critical part of any long-term sustainability strategy. As mentioned above, 80 percent of the BRIDGE teachers surveyed report that they have continued professional collaborations that grew out of the Program, as have 62 percent of the SCP teachers surveyed.

The BRIDGE Program's design and structure established processes integral to sustainability, as it uses teachers to mentor other teachers. This creates a strong network of teachers and builds momentum, as teachers reach out to friends and colleagues, encouraging them to join the Program. Not only does this strategy impart critical skills to teachers, it also gives them ownership of the project and builds a solid foundation for Program sustainability, since all online activities are implemented by teachers in their classrooms (not in an ILC). This approach, in essence, not only makes teachers change agents, but also proactive in Program maintenance and expansion.

The synergy established through *collaboration with other donors* in these countries has been, and will continue to be, critical to the long-term sustainability of these activities, and to the transition to local stewardship. Evidence of local initiatives to establish links with other organizations, as a means of building upon current activities and leveraging additional funding, was reported in Armenia, Lebanon, and Tajikistan. For example, the two SCP implementers in Eurasia (Project Harmony in Armenia and RI-SOL in Tajikistan) have systematically partnered with national and international NGOs in order to provide a breadth of services as well as to leverage their resources. This is particularly true in two main areas: technical assistance and curriculum development.

The ASCP has partnered with UNDP to establish and support four Regional TeCes, while TSCP has partnered with a local ISP (Babylon-T) to extend the ILC network to rural communities. In terms of curriculum development, ASCP enlisted Connected Minds to design civics-based curriculum, and iEARN to deliver teacher workshops on how to integrate IT into the classroom and how to design collaborative learning projects. TSCP has partnered with IFES for assistance in developing a civics education textbook and teacher's guide in local languages. Finally, for the TSCP, RI-SOL leveraged their resources by contacting CARE, and selecting communities in Tajikistan where CARE was already working and where there was already some community mobilization. This ensured momentum and a solid base for the TSCP community building activities, now and in the future.

Donors are certainly more aware of the Program, and many have actively collaborated with grantees. This may present ample opportunities – both big and small – for further collaboration, leveraging resources and activities, creating relationships, generating products, and establishing structures necessary for Program sustainability. As the participants themselves become more involved and experienced, they also reach out, making contacts with counterparts in different organizations; in some cases, the results include new sources of funding for Program activities.

Teachers, students, and Master Trainers maintain connections with those they have met through the Program, another key element of sustainability. Overall, substantial proportions of the Program's students and teachers have maintained contact with people they have met during the Program. This includes 76 percent of BRIDGE teachers and 71 percent of SCP teachers surveyed. Similarly, 79 percent of the Master Trainers are in contact with people they met. The majority of BRIDGE students (82%) in this online survey have remained in contact with people they have met during the Program, and more than half of the SCP students (56%) indicate they have done so, as well.

Across the 12 countries included in this evaluation, it is clear that communities are, indeed, coming together and organizing themselves to raise funds for the Program and the ILCs in their communities. Nearly three-quarters of the Master Trainers, over half of the SCP teachers (52%), and one-quarter of the BRIDGE teachers in the survey report that funds have been raised in the school or community to support Program activities. While the exact amounts of the funds raised are unknown, these fundraising efforts signal that schools and communities are beginning to formulate plans for the future of the ILCs and the continuation of Program activities once U.S. funding ceases. Indeed, grantees have been training communities in developing action plans. In some cases, these are strategies for moving towards a particular goal; in others, they take the shape of more formalized work plans or plans for establishing new organizations.

The SCP in Bosnia and Herzegovina specifically required community involvement in Program activities, and so raised awareness within the community – a key element of sustainability. The online curriculum was crafted as a set of units, culminating with a unit on *“Building a Collaborative Community.”* During this final unit, students interviewed key community members as part of their research, and involved the community in project activities. As school administrators and teachers try to raise funds for future Program activities now that U.S. government funding has ended, these connections with important community members have become essential.

For their part, the country Programs have also made efforts to include communities through outreach activities and the dissemination of information regarding Program activities. For example, students and teachers commonly use presentations to inform others in their communities about Program activities; approximately 50 percent of SCP students and teachers report doing so, as do 80 percent or more of the BRIDGE students and teachers.

In addition to sharing information about the Programs, participants are also sharing information about what they have learned. Program participants (students and teachers) report sharing their skills with at least 18 or more people a month, on average. What they communicate to others is also revealing; approximately 41 percent of BRIDGE teachers in the online survey note that they share their English Language training with other teachers and 48 percent say they share the new English language curriculum/materials they have developed. About one quarter of the SCP teachers indicate that they share two critical skills with other teachers: computer skills (25%) and how to identify educational resources online (27%). Finally, 67 percent of BRIDGE students surveyed and 45 percent of SCP students surveyed share their computer skills with other students. This substantial multiplier effect contributes to long-term sustainability, as students and teachers share their skills and learning, with colleagues, peers, and others in their communities.

E. Civic Education, Community Building, and Community Service

Improving civic education and providing opportunities for effective community building and increased community service are a particular focus of SCP, especially in Armenia and Tajikistan. Both of these Programs have designed and implemented a civics education curriculum. Project Harmony has partnered with another organization, Connected Minds, to design a civics-based curriculum for the ASCP, while RI-SOL has partnered with IFES to develop a civics education textbook and a teachers' guide in Tajik, Russian, and English for TSCP. In addition, online resources for civic education have been developed. The ASCP website has an online library in Armenian that contains over 20 civics-based resources to enhance the civics curriculum. In addition, there is an Armenian language website that makes available lesson plans created to supplement the state civics curriculum for 8th, 9th and 10th grades.

Students in the online survey indicated that they discuss local and community-related issues in the SCP online fora. In the case of ASCP, several of the online projects exposed students to the political process in Armenia and gave them direct access to individuals they might not normally meet (such as Armenian politicians). The TSCP online fora also reinforce the project's focus on civic education. Participation in the online activities has changed student attitudes toward civic participation (e.g., democracy) and corruption. In Armenia, the SCP students have become less accepting and tolerant of "old behaviors," which they characterize as "favoritism" and/or "corruption." They expressed optimistic sentiments about a "new way of thinking;" a tangible sense of civic engagement is evident in the students of both Programs. Students in Bosnia and Herzegovina also express positive sentiments and well-articulated ideas regarding civic engagement due to online project activities promoting collaborative community building. In these online projects, SCP students in Bosnia and Herzegovina have discussed how to make school grounds safer, and how to improve public spaces around their schools and towns.

One of the most noticeable and significant impacts of these Programs is the level of involvement in community service by participants. Fifty-five percent of the SCP teachers surveyed reported that they have organized community service projects with students and 66 percent of them say they have participated in volunteer or community service activities. Forty-four percent of the SCP students say their volunteer or community service activities have increased, and 67 percent intend to either participate in or lead community service activities in the future. For example, as part of the 2005 and 2006 GYSD, TSCP students have worked on a project to raise funds for the elderly, cleaned a park, visited veterans and an orphanage, and volunteered to teach community members how to use computers. Reported community service figures for the Master Trainers are high, as well. A majority of those surveyed (86%) report that their volunteer activities have increased, including; providing training to children or community members with special needs (72.4%), and organizing new activities or projects in the community (64.1%). This community outreach has also had an impact on communities themselves, in terms of civic engagement and service. Fifty-seven percent of the community members surveyed in Tajikistan report that their own volunteer activities and community service have increased since witnessing the efforts of SCP participants.

Although not an explicit goal of the BRIDGE Program, the online survey data indicates that BRIDGE participants have increased their direct involvement in their communities as a result of the Program. Citizen and youth empowerment, as well as social responsibility, are fundamental principles of the BRIDGE Program. Program activities and projects provide opportunities to engage in collective action, problem solving, and activism.

Sixty-four percent of the BRIDGE teachers surveyed have either organized or participated in community service projects with the students; overall, 76 percent say their volunteer and community service activities have increased. Eighty-eight percent of the BRIDGE students in the survey reported that their community service activities increased with their participation in the program and 92 percent intend to continue with these activities in the future, perhaps in a leadership role. Like the SCP students, the BRIDGE students in Lebanon have been involved with community service projects, such as cleaning up public park spaces. The YouthCaN environmental projects and fora, in particular, have allowed the Lebanese teachers and students to combine PBL with outreach activities for the community. BRIDGE students in Lebanon have involved their parents, their communities, and the media in their initiatives to change behavior, to generate interest in their community projects, and to educate others. The BRIDGE teachers in Lebanon have been instrumental in this process.

Many of the ILCs in the ASCP are used for activities that directly benefit the community, such as computer training for community members, the unemployed, school staff, and teachers in schools outside the ASCP network. The ILCs in the TSCP have also served the community: community members' use of ILCs has enhanced the civic engagement of these communities. Half of the community members surveyed report that the centers have been used to host or facilitate meetings about local issues. This finding is supported by the data in the online survey for Master Trainers. Approximately 77 percent of the Master Trainers surveyed report that the computer centers have contributed to greater community participation in local government, and 87 percent indicate that the ILCs have hosted or facilitated community meetings and events to discuss local issues.

F. Reconciliation and Regional Stability

There are substantial challenges to reconciliation and conflict resolution in the SEE region. In light of these challenges, one of the unique features of the SCP in SEE was its emphasis on building interpersonal communication skills among participating teachers, as a means of facilitating intra-regional dialogue. While the grantee proceeded cautiously in terms of setting up direct, inter-ethnic dialogue concerning conflict resolution, the approach of exposing students to “others” from different ethnic groups showed considerable promise. Through the SCP online activities, students in Bosnia and Herzegovina were exposed to students from different ethnic and/or religious backgrounds, both within their own country as well as in the region. In these online fora, they learned about daily life elsewhere and commonalities among all students. Students in Bosnia and Herzegovina reported to the evaluation team that life in Kosovo and Albania was very much like their own – that the problems faced by the countries are the same. Students from throughout Bosnia and Herzegovina discovered similarities, which may seem evident due to close geographic proximity; however, these groups of students often had very little contact with others, due to ethnic segregation and lingering hostilities in the area. Therefore, this discovery is a critical achievement.

The online forum on ‘My Town’ enabled students to share information about themselves and their town (daily life, etc.) with other SCP students. The online forum on community building gave SCP in SEE students an opportunity to work on collaborative projects with students from different countries or ethnic groups. In these online activities, students designed community projects and provided feedback to other student groups regarding their projects. This activity was designed to foster cross-cultural awareness, as well as cooperation and online interaction among students in different ethnic groups.

G. English Language Instruction and English Language Skills

Enhancing and refining English language instruction, and by extension, developing participants’ English language skills, are key goals of the BRIDGE Program. Two-thirds of BRIDGE teachers surveyed reported that they have updated their English language curricula, and over half (56%) have developed new English language curricula as a result of the Program. Close to 70 percent of BRIDGE teachers have integrated English language materials into classes in other subject areas. Almost all (92%) of the BRIDGE teachers say that they have adopted English language resources from the Internet.

The acquisition of English language skills has enabled teachers to act as catalysts for the application of these skills throughout the school curriculum. In addition, almost 50 percent of BRIDGE teachers indicate they have shared new English language curricula and materials with teachers in other schools.

Indeed, some 85 percent of BRIDGE teachers surveyed feel that the English language component of the Program has enabled them to express themselves better in online fora and discussion groups. The survey data revealed that teachers’ English skills actually determine the extent to which they interact with others from different countries. Generally, teachers who are

more comfortable and confident in English interact more with others from different countries than those who express less confidence in their English language abilities.

iEARN staff estimate that about 70 percent of all BRIDGE online projects are conducted in English, which means that most of the BRIDGE students are at some point communicating online in English. The students confirmed this in focus groups in Lebanon. In addition, much of the content on the Internet is in English. Exposure to English via online activities has increased BRIDGE students' interest in learning and studying English (as reported by both students and teachers in focus groups in Lebanon). Over 90 percent of the teachers in the online survey in *both* Programs (92% in SCP and 96.4% in BRIDGE) indicated that access to the Internet has had a 'large impact' or 'some impact' on their students' motivation to learn English.

The online activities in English can also be directly linked to improvements in students' English language skills. BRIDGE teachers in Lebanon identified pronounced advantages associated with communicating in English in the online fora. English language skills determine not only *what* students do in these Programs but also *the extent* to which they are able to take full advantage of the opportunities to communicate with students who do not speak their native language. Teachers noticed improvements in student sentence construction and grammar. In the words of one teacher, "(t)hey began to compose in English, not just translate Arabic into English." Students in the online survey also affirm that they have made improvements in their English language abilities. Eighty-three percent of the BRIDGE students report that their English language abilities have improved since they began participating in the Program. Approximately three quarters of them rate their command of English as "excellent" or "very good." Moreover, 80 percent of the BRIDGE students believe that the English language skills they have developed in the Program have improved their performance in other coursework.

Although English language instruction is not a stated objective of SCP, almost two-thirds of those students who took the online survey in the SCP countries reported that their English language skills have improved as a result of participating in the Program. For example, many TSCP students who may speak Tajik or Uzbek at home reported that their work on specific projects and at the ILC has improved their knowledge of English. While SCP teachers do not focus on introducing English language curricula, English is by default the language of choice (or necessity) in online activities, as participants often do not have another language in common. In the case of Tajikistan, the Program has developed resources to further English language acquisition through the creation of a TSCP-wide English Club website. Across the SCP countries, the significant impact of the online activities on English language skills is quite evident. More than half (53.7%) of the SCP students surveyed rated their English as 'excellent' or 'very good.' Again, this is a positive and unanticipated outcome, especially given the fact that English language learning is not an explicit focus of the Program in these countries.

12

RECOMMENDATIONS

Chapter Twelve

One of the hallmarks of the School Connectivity Programs is that they are not one cohesive Program operating in different countries, but rather six different Programs with different goals and objectives. Since the Youth Programs Division in ECA has consolidated its management of all Connectivity Programs under the rubric of the Global Connections and Exchange Program, it is useful to consider overall recommendations that can be applied across these varied Programs.

Recommendations emerging from this evaluation are offered more as key components of effective Connectivity Programs. While a “one size” approach does not fit all countries and regions, certain suggestions are intrinsic to a successful Program. Evaluators developed these recommendations after reviewing survey responses from SCP and BRIDGE participants (students, teachers, and Master Trainers) in 12 countries, and information gleaned through site visits in four countries (Armenia, Bosnia and Herzegovina, Lebanon, and Tajikistan), in-depth interviews with ILC staff, school administrators, grantee staff, PAS staff in U.S. Embassies, and participant focus groups.

1. Select Specific Types of Online Activities to Promote Mutual Understanding

The online survey data collected from students and teachers reveal that certain types of online activities occur more between Program participants across countries than others (i.e., *online fora and online projects*). Good examples of this are the iEARN/BRIDGE YouthCaN online fora and projects, or activities similar to SCP in BiH Unit 4 (Building a Collaborative Community: “What we can do together”). Online fora and projects are primary Program components across SCP and should be emphasized, whenever possible, since these activities enhance mutual understanding among Program participants.

2. Use Online Activities to Encourage Communication in English

Online activities which involve participants from various countries, by default, require participants to communicate in English, unless there is a common language, such as Arabic, spoken in a number of countries. Additionally, much of the content on the Internet is in English. Online activities that engage participants from a variety of countries should be emphasized, since these activities facilitate the use of English and lead to improvements in participants’ English skills. English language abilities help students in their school work and provide them additional skills as they enter the job market.

3. Encourage Student Engagement as a Means of Assisting Educational Reform

Allowing students to select discussion topics for the online fora and to propose online projects guarantees that topics of interest to them will emerge. Direct student input should be encouraged

for it gives students a strong sense of empowerment and ownership of the Program activities. Although students are not the primary agents of change in the classroom, small changes, such as giving students a voice, can produce large changes in motivation and student participation in class. A democratic approach to Program implementation contributes to sustainability by engaging students and therefore reinforces their commitment to the Program.

4. Integrate Community Involvement into Program Content

Online projects that require student interaction with community members should be encouraged. The SCP in BiH Program developed an online forum that focused on the students' hometowns, while the TSCP required all project groups to develop "My Community" websites. Student research included interviewing key members of their communities as the basis for a 'virtual' presentation of their home towns. This type of activity is beneficial in several ways. First, it is a very useful way of illustrating and introducing complex ideas to the students (such as civics education, community building, and local government). It exposed students to community members (and organizations) with whom they had little or no previous interaction. This interchange between students and members of their communities also facilitated community awareness that can lead to Program sustainability. Exposing community members to the Program activities is, again, vital for future community involvement in sustaining the Program and the ILCs through fundraising and other activities.

5. Engage Teachers by Linking their Areas of Specialization to Program Objectives

Teacher involvement in Program activities varies by the teachers' specialization or background. While a majority of the Computer Science and English teachers are engaged in many, if not all, of the online Program activities, a significant proportion of the Social Studies and Literature teachers are not. In order to engage teachers in the Program, they must see a clear connection between Program activities and their own classroom activities. Training materials for teachers should be relevant to their classroom activities and specific subject, and clear connections should be drawn between the objectives of teaching and the objectives of the Program activities.

6. Focus on Social Studies Teachers to Achieve Key Program Goals

Given the broad-based Program goals in terms of mutual understanding, conflict resolution, and civic engagement, it seems very important that Social Studies teachers and teachers of similar subjects are well integrated into the Program. In some cases, specialized workshops or training sessions may be necessary to determine their needs and provide specific training on how to use IT in crafting lessons for the Social Studies curriculum.

7. Encourage Use of Teachers as Mentors for Other Teachers

The Program should be structured so that teachers serve as mentors and Master Trainers (once they have completed a series of online courses) for other teachers entering the Program. This ensures that innovative practices and online activities are integrated directly into the classroom

and it ensures that the Program naturally expands and is sustainable as teachers reach out to their colleagues, sharing what they have learned in terms of pedagogy and computer skills.

The BRIDGE Program in Lebanon, like all iEARN Programs, is structured around teachers who volunteer to participate. Teachers are prepared to train other teachers. They learn how to mentor other teachers in the Program, deliver online courses, and also to facilitate and monitor the content of the BRIDGE online fora. Such an approach can be adapted, and its benefits shared, across the different Connectivity Programs.

8. Focus on the Professional Development of Teachers

Teachers are a vital resource for the SCP and BRIDGE Programs. They, like the students, are active participants who are interested in learning and developing new skills. All educational reforms, including IT integration in the classroom, depend upon the willingness and skill of the teachers involved. Every opportunity should be used to further the professional development of teachers. It is recommended that teacher training be provided or continue in the following four areas:

- Computer Training for Teachers;
- Teacher Workshops on How to Organize and Facilitate Online Fora;
- Materials and Workshops on How to Integrate IT into Select Classroom Topics; and
- Use of Conferences and Teacher Exchanges for Focused Teacher Training.

8.1 Computer Training

The online survey data showed that computer skills, more than English language skills, determine the *breadth* of teacher participation across the different activities (i.e., the more comfortable the teacher is with computers, the more he/she will engage in a number of different activities). The use of IT in the classroom is new in most of these countries. Many teachers have not received extensive computer training; in some cases, they have received no computer training at all prior to joining the Program. Structured training sessions for teachers on the use of computers are essential and should remain a key feature of all the SCP Programs.

8.2 Workshops on How to Organize and Facilitate Online Fora

In some instances, more teacher training in facilitation of online fora and/or online projects may be required to ensure that these types of activities flourish. Clear objectives for an online forum may assist teachers in their role as facilitators/moderators and distinguish the SCP online fora from informal ‘chats.’ The model of online teacher training sessions developed by iEARN for this purpose could to be adapted across the Programs.

8.3 Materials and Workshops on How to Integrate IT into Select Classroom Topics

Integration of IT into the classroom is not always intuitive. Some teachers have an easier time than others and some disciplines seem to lend themselves more to use of the Internet and/or computers in the classroom. For example, results of the online teachers survey show that Social Studies teachers participate in fewer online activities than other teachers (e.g., English teachers and computer science teachers). Materials and/or workshops tailored specifically to social studies classroom activities, for example, should be developed so that these teachers have didactic

examples of how to integrate IT in their classrooms and how to use or develop online fora in topics related to social studies.

8.4 Use of Conferences and Teacher Exchanges for Focused Teacher Training

The online teachers survey revealed that teachers who participate in conferences/exchanges also participate in many more of the online activities than teachers who do not participate in conferences/exchanges. CRS staff members see a direct correlation between participation in teacher exchanges and the teachers' ability to adopt and adapt new teaching methodologies in the classroom. As part of the reciprocal exchange, teachers from the SEE region were able to witness different methodologies in action and obtain hands-on experience using them. Training on IT use in the classroom, use of video conferencing, and additional computer training sessions could form the basis of focused teacher trainings. Conferences and teacher exchanges provide excellent venues for targeted teacher training and should be used as opportunities to engage in professional development for teachers.

9. Facilitate Recruitment into Program, Examine the Constraints Faced by Teachers

Because teachers are the linchpin of the Program, it is important to identify and understand the constraints faced by teachers, in order to maximize future recruitment of capable teachers. One of the biggest challenges to teacher recruitment in the BRIDGE and the SEE regions is the requirement of English proficiency. English language proficiency is essential in these Programs (in some cases, there is no common language across the countries). While this is less of a problem in countries where a significant portion of the population speaks English (e.g. Lebanon), it is more of a challenge in others. In Bosnia and Herzegovina, for example, schools that did not have an English teacher could not participate and those schools that lost their English speaking teachers found it difficult to remain in the Program. Unless English language instruction becomes a focus of teacher training, this issue will be best resolved through strategic recruitment of English teachers in these countries.

In terms of teacher recruitment in the United States, one of the most successful strategies has been the use of professional networks (conferences, associations, newsletters etc.) to publicize the Program and recruit teachers. This activity should continue. One of the most consistent challenges to recruitment of teachers in the United States is local regulations (at the school district level) that restrict teachers from engaging in after-school activities (which is the domain of an after-school coordinator). Grantees should systematically identify which districts pose more problems than others, and target those schools where teachers have more flexibility in terms of their Program participation.

It is also recommended that all participating schools in the United States be provided summary information on partner school countries (e.g., map, location, general background information, history, etc.). Due to certain misperceptions and concerns, one school elected not to participate in the Program, after being 'partnered' with a school in Central Asia. Providing an informational packet will reduce the chance of this type of reaction.

Finally, teachers overseas and in the United States all stated that the amount of preparation time required for full participation in the Program was, at times, onerous (teachers are volunteers and Program activities are above and beyond their normal workloads). In some cases, this led to problems in teacher retention. This constraint should be considered carefully, and every effort made to assist teachers in this regard. For example, investments in focused teacher training (recommendation of 8 sessions) may lead to reduced preparation time and enable more teachers to remain in the Program.

10. Structure Successive Online Activities to Guide Students through the Program

The SCP Program in Bosnia and Herzegovina was organized around a clearly structured set of online activities called ‘Units.’ This offered students and teachers a clear progression of activities which, by design, increased in terms of complexity. It is advisable to organize the Program activities in some clear order of progression – in terms of skill building, content, and concepts – and tie the sequence of activities to Program objectives.

11. Provide Virtual Resources in Local Languages for Teachers

Online teacher resources in the local language are extremely important and should be made available. A noticeable feature of the SCP Program in Eurasia is the provision of online resources for teachers in the local languages (Armenia, Russian, Tajik, and Uzbek). These resources are extensive and cover a number of different areas. Some of the resources are didactic, while others are content-oriented, such as civic education texts. Teachers across the four countries visited requested more such training materials. Providing easy-to-use and easy-to-access (online) resources for teachers in the local language is an effective and efficient way to distribute materials.

12. Illustrate Complex Ideas through Concrete Projects

Complex topics, such as civic education and conflict resolution, should be illustrated through concrete projects which, if possible, rely upon organizations or political, conflict resolution or equivalent processes in these countries. For example, to address the objective of civic education, the ASCP organized an online *Student Assembly* to form a nationwide Student Parliament in Armenia in 2003 and 2004. The real life aspect of this online governance project was crucial. The main goal was to expose students to the nuances of the Armenian Legislative body through actual, political participation. It was also intended to broaden their views on the workings of democracy through their own political engagement. The student parliamentarians discussed various school-related issues, as well as documents currently under consideration in the Armenian National Assembly. Furthermore, this project gave ASCP students previously unattainable exposure to politicians in Armenia.

13. Partner with International and National NGOs

Whenever possible, it is recommended that SCP activities be integrated with activities sponsored by other NGOs, especially in the areas of community service, community building, and mutual

understanding. TSCP has worked closely with IFES to promote civic education and student involvement in the community through the creation of Student Action Committees in TSCP schools. One concrete result has been the broad participation of TSCP participants in the ‘Global Youth Service Day’ activities. Teams from the various TSCP schools have worked in their communities on a variety of civic improvement activities: raising funds for the elderly; cleaning parks; visiting veterans and orphans; bringing books and toys to the orphanage; and teaching community members how to use computers. These projects have the benefit of bringing the TSCP students in direct contact with members of their communities (both those in need, as well as those who work in these various organizations). They provide the students with experiences and skills they can call upon in future community outreach activities.

14. Empower Girls by Explicitly Targeting their Participation

TSCP has been especially successful in fostering the involvement of girls in the Program. This has produced a number of positive outcomes: encouraging girls to complete high school so that they can continue to take part in the Program; providing them with the means of acquiring important, cutting-edge skills that can increase their chances of employment; giving them (and boys as well) the opportunity to improve their English; and building their self-confidence. ECA provided guidance to TSCP to ensure that girls were well-represented in the Program. This can be extended to other Connectivity Programs, as feasible.

15. Use Virtual Conferencing to Enhance the Connectivity of Program

The use of regional video conferencing as part of the SCP Program activities is very promising and we recommend that country Programs be encouraged to participate in this type of activity, if the technology is available. Both the ASCP and Lebanon (BRIDGE) Programs have recognized the potential of this technology and have already used it or are moving in that direction.

There are many benefits to this type of activity. First, unlike traditional conferences, a video conference underscores the ‘connectivity’ of the SCP and BRIDGE Programs and fits nicely with the goal of integrating new technologies into the educational systems of Program countries. Second, from discussions with teachers and students in Lebanon, it is apparent that video conferences can accomplish many of the same goals as traditional conferences by providing a structured event where students share project work and discuss ideas and topics virtually. Both teachers and students alike found the regional video YouthCaN conference held in Beirut to be educational and stimulating; the level of excitement in the room was tangible as they discussed this event. They explained how they learned things from the presentations of the other project groups, and all of them enjoyed the real time, virtual interaction (seeing faces and hearing voices, not just reading text).

In addition, the regional video conferencing centers established in Armenia, through the partnership with the UNDP, can be used to connect ASCP schools within the country. These video conference centers can also be used to ‘virtually’ introduce visiting American teachers to larger numbers of Armenian students and teachers than is currently possible during their short, 15-day stay. This would expand the reach of this exchange.

16. Maintain the Infrastructure of the ILCs through an Organizational Structure

In some Program countries, SCP represents the first time a local school has had a functioning computer center connected to the Internet. While the technical issues have largely been resolved at this stage in the Program, the issue of funding these centers locally remains a challenge. Without an Internet connection and adequately-maintained computer equipment, much of the gains of the Program will be lost. While some of the country Programs are organizing training seminars for fundraising activities and developing business plans for the ILCs (i.e., Armenia), others are planning for some level of commercialization of the ILCs (e.g., charging the community for use) in order to provide ongoing funding (Tajikistan).

TSCP has been very proactive in considering sustainability issues to ensure that there remains an ongoing effort once funding ends. TSCP has created a national-level, non-profit umbrella organization to provide an organizational link among the ILCs. This structure creates an ILC network that has a number of practical advantages in terms of future funding. Schools in the network can independently seek funding opportunities (e.g., offer organizations access to the ILC for seminars and trainings in exchange for a fee), as well as apply for grants individually or as part of the network. In addition, the network will provide a lower rate for Internet access to the member schools.

It is recommended that the country Programs establish some type of structural arrangement with practical implications for funding. This seems to be a much more promising approach than simply providing training to individual schools and encouraging them to go it alone.